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VOLUME IX.

MADRAS PRESIDENCY TO MÚLTÁI.

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THE INDIAN EMPIRE
Prepared for Dr. W. W. Hunter's
IMPERIAL GAZETTEER OF INDIA
Scale 265 miles - to 1 inch
100 50 0 100 200 300 400
THIBET
RAJPUTANA
AFGHANISTAN
BALUCHISTAN
ARABIAN SEA
Tropic of Cancer
Gulf of Cutch
Gulf of Cambay
BAY OF BENGAL
Mouths of the Ganges
Malabar Coast
Coromandel Coast
Laccadive Islands
Maldive Islands
Gulf of Manar
Cape Comorin
Gulf of Martaban
Andaman Is.
Nicobar Islands
Mergui Archipelago
INDIAN OCEAN
BOMBAY
CALCUTTA
MADRAS
REFERENCES
British Territory colored Pink
Dependent & Subordinate Native States Yellow
Independent States Green
Railways opened
Do. not opened
Roads
The numerals denote the height above sea level in feet.
This Map is intended only to exhibit the principal

IMPERIAL GAZETTEER

OF

INDIA.

VOLUME IX.

Madras Presidency.—The Presidency of Fort Saint George, as officially styled. It occupies with its dependencies, and with the State of Mysore, the entire south of the Peninsula of India. Its extreme length from north-east to south-west is about 950 miles; its extreme breadth about 450 miles. The Madras Presidency consists of three classes of territory—(1) the 22 British Districts within the Presidency; (2) the Agency Tracts of Ganjám, Vizagapatam, and Godávari, under a special administration; and (3) five Native States in political dependence on the Madras Government, namely, Travancore, Cochin, Pudukota, Banganapalli, and Sandúr. The aggregate area of the 22 British Districts was returned in 1881 at 119,553 square miles; and the total population at 29,875,343 persons, dwelling in 226 towns and 42,719 villages. The Agency Tracts comprise an area of 19,928 square miles, and a total population of 951,875, dwelling in 9019 villages. The five Native States have an area of 9611 square miles and 3,344,849 inhabitants, dwelling in 5058 towns and villages. Including, therefore, the Agency Tracts and the Native States, the territory under the Madras Government (1881) contains an area of 149,092 square miles, and supports a population of 34,172,067 persons, dwelling in 57,022 towns and villages. The seat of Government is at the Presidency town, MADRAS CITY.

Boundaries.—On every side but the north, the Madras Presidency is bounded by the open sea. Along the east, or rather running up to north-east, extends the continuous coast-line of the Bay of Bengal, stretching for nearly 1200 miles, from Cape Comorin to the Chilká Lake; the western coast is formed by the shores of the Indian Ocean

and the Arabian Sea, for about 540 miles. Off the south-east lies the British Colony of Ceylon, separated by a shallow strait, across which runs the string of rocks and sandbanks known as 'Adam's Bridge.' The irregular northern boundary of Madras has been formed by accidents of history. On the extreme north-east is the Bengal Province of Orissa; next (proceeding westwards) come the wild highlands of the Central Provinces; then, for a long stretch, the Dominions of the Nizám of Haidarábád, separated by the Kistna river and its tributary the Tungabhadra; lastly, on the north-west by west, the Districts of Dhárwár and North Kánara in the Bombay Presidency. The independent State of MYSORE, which occupies a large portion of the centre of the area thus defined, may be regarded, for geographical purposes, as a part of the Madras Presidency. The LACCADIVE ISLANDS also form, for administrative purposes, a part of the Presidency, being attached to the Districts of Malabar and South Kánara.

General Aspect.—Viewed on the map, Madras presents a very broken aspect. Its eastern shore extends up the peninsula more than twice as far as its western; while its heart seems to be eaten out by the independent State of Mysore. From a physical point of view, it may be roughly divided into three portions—(1) the long and broad eastern coast; (2) the shorter and narrower western coast; and (3) the high table-land in the interior. These divisions are determined by the two great mountain ranges of the EASTERN and WESTERN GHATS, which give the key to the configuration of all Southern India.

The Eastern Gháts, which lie entirely within the Madras Presidency, form a continuation of the confused hill system of Chutiá Nágpur. They run, rather as a succession of hills than as a range of equal importance with the Western Gháts, in a south-westerly direction almost through the whole length of Madras, until they lose themselves in the NILGIRIS, and there join with the Western range. Their average height is only 1500 feet, and for the most part they leave a broad expanse of low land between their base and the sea. Their line is pierced by three great rivers, the Godávari, Kistna (Krishna), and Káveri (Cauvery), as well as by minor streams; so that they do not perform the part of a watershed. These hills may from one point of view be regarded as the eastern cliff of the southern and central plateau.

The Western Gháts, on the other hand, stretch southwards along the eastern shore of the Arabian Sea and the Indian Ocean, from north of Bombay, and satisfy all the characteristics of a mountain range. The line is only broken by the Pálghát gap; the northern section measuring about 800 miles in length and the southern section about 200 miles. Rising steeply at a distance of 30 to 50 miles from the coast in the Madras Districts, the Western Gháts catch almost the

whole rainfall of the monsoon, and in the south not a single stream breaks through their barrier. Their eastern face gradually slopes down to the table-land of the central plateau. Some of the peaks attain an elevation of more than 8000 feet. The highest peak of the Nílgiris is 8760 feet in height, while the loftiest point of the Anamalai hills is nearly one hundred feet higher. The Pálghát gap affords a singular passage to the wind, which is elsewhere barred by the continuous range. The country immediately east of the gap receives the rainfall of the south-west monsoon; and during the north-east monsoon, ships passing Beypur (near the mouth of the Pálghát gap) meet with a much stronger wind from the land than is felt elsewhere along the western coast.

Between the ranges of the Eastern and Western Gháts lies the central table-land, with an elevation of from 1000 to 3000 feet. This inner table-land includes Districts of the Bombay Presidency, the Central Provinces, the Berars, the Nizám's Dominions, the Ceded Districts, with other Districts of the Madras Presidency, and the whole of Mysore. Its outline follows the triangular shape of the peninsula. All the main rivers of Madras Presidency, particularly the Godávari, the Kistna, the Penner, and the Káveri (Cauvery), have their upper courses here. From the Western Gháts, the plateau shelves to the east. Depressions in its surface coincide with the valleys of the rivers and their chief tributaries.

Each of these three divisions of the Madras Presidency has strongly marked features of its own. The eastern coast possesses the deltas of the three great rivers, where artificial irrigation has combined with natural fertility to reward the toil of the husbandman. On the west coast, the rainfall never fails; but cultivation is hemmed in within narrow limits by the mountains and the sea. In the central plateau, the country is generally bare, the rainfall light, and the means of irrigation difficult. But it contains many tracts of fertile soil, and the cultivator does his best to store in tanks the local showers which the monsoons bring to him from either coast.

Rivers, Mountains, and Lakes.—The three principal rivers of Madras are the GODAVARI, KISTNA or KRISHNA, and KAVERI (Cauvery), each with a large tributary system of its own. All of these rivers have the same uniform features. They rise in the Western Gháts, and run right across the peninsula in a south-easterly direction into the Bay of Bengal. They drain rather than water the upper country through which they flow, and are here comparatively valueless either for navigation or irrigation. But, like other rivers which fall into the Bay of Bengal, all of them spread over alluvial deltas before they reach the sea, and there become capable of being restrained and utilized by the agriculturist and engineer. Other rivers on the east coast, of similar character but

smaller dimensions, are the NORTH and SOUTH PENNER or PINAKINI, the PALAR, the VAIGA, the VELLAR, and the TAMBRAPARNI.

The two main hill systems of the Presidency have been described in the Eastern and Western Gháts. The NILGIRIS, which join these two ranges, culminate in DODABETTA (8760 feet), one of the loftiest peaks in Southern India. There are, besides, many outlying spurs and tangled masses of hills, of which the ANAMALAIS in Coimbatore, the PALNI (Pulney) HILLS in Madura, and the SHEVAROYS in Salem are the most important. Anamúdi, a peak of the Anamalai range, is the highest point (8850 feet) in Southern India.

South of the Pálghát gap—where, so to say, the backbone of India is cut down to within 1000 feet of the sea-level, by a break 25 miles wide—the Western Gháts resume their course at their full level down to Cape Comorin, and widen out into the highland tract lying between Madura on the eastern side, and Malabar, Cochin, and Travancore on the western coast, which is known as the Anamalais in Coimbatore District, and as the Palnis in Madura. This region, higher than the Nílgiris in parts, and much more extensive, narrows abreast of the Kumbum valley (Madura), and behind Tinnevelli becomes only a mountain range between the two coasts, with a restricted area. The highland tract thus formed is very extensive, and is likely to afford an important field for European enterprise as the Nílgiri tract becomes fully occupied.

The principal lake in the Presidency is PULICAT, on the east coast, which is 37 miles in length from north to south, and from 3 to 11 miles in breadth. Pulicat Lake forms an important backwater for inland communication between Madras city and the northern Districts. The lake is supposed to have been caused by the sea breaking in through the low sandy beach. On the western coast, the perpetual antagonism between the mountain torrents and the ocean has produced a remarkable series of backwaters or lagoons, fringing the entire seaboard of Kánara, Malabar, and Travancore. The largest is the backwater of Cochin, which extends from north to south for a distance of 120 miles. These backwaters are also used for inland navigation. Continuous water communication is thus provided between Cochin and the capital of Travancore, and is thence prolonged southwards almost to Cape Comorin by an artificial canal.

Minerals, etc.—The greater part of the Madras Presidency is covered with soils originally formed by the disintegration of rocks of the metamorphic and igneous systems. Of the former system, gneiss, mica, syenite, and quartz are the most widely prevalent; while the high mountain ranges are usually of granitic formation, with a good deal of felspar. A wide belt of green-sand stretches across the country in a north-east direction from Trichinopoli. The common red soil shows by its colour

a large admixture of the peroxide of iron. Pure alluvium is found in the deltas of the eastern rivers. Tracts of the celebrated 'black cotton-soil' are scattered over the Presidency, and in places occupy the beds of prehistoric lakes.

The mineral wealth of Madras is as yet undeveloped. Iron of excellent quality has been smelted by native smiths from time immemorial. In Salem District are some remarkable deposits of magnetic iron, from 50 to 100 feet in thickness, extending continuously for miles. A Company was formed in 1825 to work the beds at Palampatti, and operations were afterwards extended to Porto Novo, near Cuddalore, and to Beypur (Bepur) on the Malabar coast. But all these enterprises ended in failure. In 1883-84, 336 mines or small workings yielded 329 tons of iron, valued locally at £4135. Carboniferous sandstone extends across the Godávari as far south as Ellore. The strata were mapped by the Geological Survey in 1871; coal was tested by borings near Damagudem, and found to be of inferior quality; and in 1881-82 the Superintendent of the Geological Survey of India expressed an official opinion that there are no coal resources of economic value in the Madras Presidency. Such seams as exist are for the most part in the territory of the Nizám of Haidarábád. Upon receipt of the opinion of the Superintendent of the Geological Survey, the Madras Government decided to stop the exploration of the Bhadráchalam coal-fields which was in progress, and to await the development of the Haidarábád fields.

Attention has recently been drawn to the promise of gold-mining in the Wainád (WYNAAD) and Kolár. Gold had long been washed in the hill streams in small quantities; and it was hoped that operations for quartz-crushing on a large scale might prove remunerative. Many of the quartz reefs are auriferous, particularly in Nambalikod and Munád. Laboratory experiments on the southern ends of six reefs have shown an average of 7 dwts. of gold to the ton of quartz, rising in one case to 11 dwts. Speculation has taken up the enterprise, and Australian experts have held out hopes of a fair profit. The Government has resolved to alienate no waste land without reserving the mining rights.

Investigations disclose the fact that gold-mining is many centuries old in Wainád. Alluvial washing was, until within the last twenty-five years, a source of a small State revenue (*motarfa*). About 1830, the Government itself embarked in the industry, but abandoned it as unremunerative after a few years. Gold may, indeed, be washed from the sands of many of the rivers descending from the Western Gháts in Malabar. The larger portion of the auriferous reefs in South Wainád are supposed to be on private land, the property of the great landowners or *jenmis* of Malabar. But the practical results of gold-mining on a large scale with European capital have not, so far, proved

encouraging in Madras. The industry cannot be regarded as having yet passed through the experimental stage (1885).

Among other minerals may be mentioned manganese in the Nílgiris and Bellary; copper-ore in many parts of the Eastern Gháts; antimony and silver in Madura; corundum in the valley of the Káveri (Cauvery). Garnets are abundant in the sandstone of the Northern Circars, and diamonds of moderate value are still found in the same region. The right to subjacent minerals in the lands of ordinary cultivators is recognised as belonging to the holders of the land, subject to special assessment in the event of their being worked. This right does not extend to lands at present waste.

Forests.—The whole south-western coast is rich in forest vegetation, but much of the valuable timber grows beyond the limits of the Presidency —in Bombay, Mysore, Coorg, and Travancore. The first essay at forest conservancy in the Madras Presidency was the introduction of a State royalty over teak and other valuable timber in Malabar and South Kánara in 1807. The measure soon assumed the character of a Government monopoly of timber throughout the coast Districts, which led to abuses, and to discontent on the part of the proprietors and inhabitants. It was accordingly abolished by Sir Thomas Monro in 1822.

Prior to 1847 there was no Forest Department in Madras Presidency. In that year, on the report of the denudation of the Malabar forests by native merchants trading with Bombay, a special officer was appointed, subordinate to the Public Works Department. The existing Forest Department for Madras Presidency was first organized in 1856, and has since then been reconstituted on an improved system. It is estimated that forests cover a total area in the mountains of the Madras Presidency of more than 5000 square miles. In 1882-83, the area technically termed 'reserved' was 2782 square miles. The total area, on hill and plain, dealt with by the Forest Department was estimated in 1879 to aggregate 10,000 square miles. Throughout this area, rules of conservation are in force in order to prevent denudation of the forests, and to maintain a stock which will meet the demand for timber and fuel that is rapidly increasing throughout India.

The produce of the forests of the Madras Presidency is turned to account in two ways. The first is that called departmental felling, according to which the Forest Department fells the timber, and brings it to the depôt and sells it or supplies it to Government on indent. The working arrangements vary in different localities, according as elephant-draught is available or not. In some forests companies of axe-men fell and lop the trees first selected and marked by the forest officer, or by his subordinates under his orders. The timber is next dragged by elephants out of the forest; once out of the forest, it is

carted to the depôt and sold for the benefit of the Department,—that is, of the State. In other forests the work is done by contract, at so much per cubic foot, the trees, however, being previously selected and marked by the forest officer. According to a third plan, the tree is sold standing, the price and number of cubic feet being estimated by a rough calculation. What has been said above refers to departmental felling; but there is a second method. This method is by licence. Under the voucher and licence system, as it is called, the timber merchant enters the forest and fells at his own option, after he has paid the seignorage and exhibited his licence. Certain native revenue officials have powers of granting licences and vouchers. This latter system is, however, under reconsideration, and, owing to many inherent defects, is likely to be abrogated.

In 1876–77, the revenue from timber sold was £19,000, while £21,000 was realized from licences. In that year, the total receipts of the Department amounted to £41,531, against an expenditure of £41,397. In 1882–83, the total receipts amounted to £90,391, and the charges to £63,655, leaving a profit of £26,736 for the year. The more valuable timber-trees comprise teak, ebony, blackwood, rose-wood, sandal-wood, and red sanders-wood. There are altogether 81 Government plantations, covering an area of 15,000 acres, on which, up to 1876–77, a total sum of £51,000 had been expended; the receipts in that year were £2680. In 1882–83, the area regularly planted was 44,977 acres. The trees thus reared are chiefly teak, red sanders-wood, Casuarina and Eucalyptus. No data exist for computing their aggregate value; but it has been estimated that from one teak plantation now coming to maturity, an income of nearly 7 millions sterling will accrue within the next hundred years. The charges during this period are estimated at under 3 millions sterling. The finest teak plantation is near Beypur in Malabar, called after its founder, Mr. Conolly. It has been formed gradually since 1844, and now covers about 4000 acres. At Mudumalli there are plantations of both teak and sandal-wood; and the Eucalyptus or Australian gum-tree now grows on the Nílgiris in magnificent clumps. In 1875–76, the total value of timber and wood exported from Madras was £104,511; and in 1882–83, £195,399.

The Forest Department in Madras has lately been reorganized, under the Madras Forest Act (v. of 1882). Shortly before the passing of the Act, the Jungle Conservancy Fund, hitherto separate, was amalgamated with the regular Forest Department. By this Act, the Forest Department has been strengthened and improved. The Presidency has been divided into two circles, a northern and a southern, with a Conservator over each; and the whole system has been placed in immediate subordination to the Board of Revenue. In 1882–83, the extent of

'reserved' forest in the southern circle was 1970 square miles; and in the northern circle, 812 square miles: total, 2782 square miles.

Wild and Domestic Animals.—The *fauna* of Southern India will be treated at some length in the concluding sections of this article. The present paragraph is confined to the administrative and economic aspects of the wild and domestic animals of the Presidency. The wild animals of Madras are for the most part common to the rest of India. Those deserving mention are the elephant, bison, stag, and ibex of the Western Gháts and the Nílgiris. Bison are also found in the hill tracts of the Northern Circars. In the State of Travancore, the black variety of leopard is not uncommon. In 1876, 981 persons (probably below the actual number) were returned as killed by wild beasts and snakes; of whom tigers killed 83, leopards 33, and snakes as many as 819. In that year, 10,322 cattle were reported to have been killed, the deaths being caused in almost equal proportions by tigers, leopards, and wolves. A total sum of £2984 was paid by Government in rewards for the destruction of wild beasts, including 236 tigers, 1021 leopards, 133 bears, 39 wolves, and 164 hyænas. The corresponding statistics for 1881 are as follows:—Number of persons killed by wild beasts and snakes, 1302; of whom tigers killed 135, leopards 47, and snakes 1064: the number of cattle killed by wild beasts was 8938, of which tigers and leopards killed about equal numbers (say 3200 each): the total sum paid in rewards for the destruction of wild beasts was £2024, the wild beasts destroyed including 189 tigers (amount of reward, £596), 837 leopards (amount of reward, £1276), 149 bears, 26 wolves, and 166 hyænas. No returns as to the number of snakes destroyed are available. The District Officer disburses the reward on production of the skin or other satisfactory evidence. The elephant is now protected by law from indiscriminate destruction.

The agricultural live stock consists chiefly of horned cattle and sheep; in 1882–83 horses numbered less than 8000; and ponies 30,000. The cattle are small in stature, the average live weight not being much above 350 lbs. In Nellore, and along the Mysore frontier, a superior breed is carefully kept up by the wealthier farmers. The cattle fairs in these Districts are frequented by buyers from considerable distances; and prizes are sometimes offered by official personages. The best buffaloes are imported from the Bombay District of Dhárwár. The sheep are of three well-marked breeds. The first are small, with black or white hairy wool. The second are about the same size, red in colour, almost destitute of wool, and covered with short coarse hair. The third are large, long-legged, and goat-like, with two tassels from the neck, and with little wool. The sheep yield on an average about 25 lbs. of mutton. The annual clip of wool, which is always

largely mixed with hair, is usually not more than 1 lb. per head. Experiments in breeding sheep have been made at the Saidápet farm, with fair success. In 1875–76, the total number of cattle in the Presidency was returned at 8,270,000 head, and of sheep at 6,745,000; in 1882–83, the number of cattle was 8,624,849, and of sheep, 5,635,867. In 1875–76, the export of hides and skins was valued at £1,081,585, and of horns at £22,591. In 1882–83, the export of hides and skins was valued at £2,040,935, and of horns at £40,631. Raw wool is not exported to any appreciable extent, the supply being locally consumed in the manufacture of *kamblis* or coarse blankets.

History.—The history of the Madras Presidency forms an integral part of the history of India. The narrative of its events occupies many hundred pages of Orme, Mill and Wilson, Elphinstone, Grant Duff, and other standard works. The researches of Orme, the special historian of English military operations in Madras, form a noble series of folio manuscript volumes in the India Office. The great missionary scholar of the Dravidian tongue (Bishop Caldwell), and the eminent Sanskrit scholar of Southern India of the Civil Service (the late Dr. Burnell), have opened up a far-stretching background of research. It would be unsuitable, in a work like the present, to attempt more than a bare summary.

The history of Southern India is the history of the Dravidian races, which have not yet found a chronicler. Of their ethnical affinities and of their advent into the country little is known. Their early conversion to Hinduism is perhaps recorded in the great epic of the *Rámáyana*, which represents the monkey tribes as assisting the god to destroy the demon king of Ceylon. Subsequently, the wave of Buddhism passed over the land; and in historical times, Muhammadan and Maráthá invaders founded dynasties. But through all changes of religion and government, the obstinate persistence of the two languages of Tamil and Telugu proves how deeply the Dravidian stock is rooted in the soil.

Although, however, continuous records are wanting, many interesting facts indicate the large part played by the South in the early history of India. The Malabar coast, with its wealth of spices and timber, was the cradle of commerce; and has given local or Tamil names to articles of Indian trade, from the time of Solomon downwards. Syrian Christians and Muhammadans from Arabia have been settled on the western coast from the earliest times, and their proselytes form a large section of the population of Malabar and Travancore. A colony of Jews, too, have resided in Cochin for many centuries; and in Malabar, the first Portuguese adventurers found their richest cargoes. At a later date, historical interest shifted to the opposite shore of the Karnátik, where the issue was fought and decided

of English supremacy in the East. Here the schemes of Dupleix for territorial aggrandisement were baffled by the genius of Clive. Here also were witnessed the successful strategy of Coote, the indomitable spirit of Haidar, the ferocity of Tipú, and the beginnings of Wellington's career of victory. Since the opening of the present century, Madras has ceased to furnish material for the military historian.

It is probable that until the paramount power of England established universal peace, the whole of Southern India had never acknowledged a single ruler. For a time, indeed, it is conjectured that the Hindu dynasty of Vijayanagar there exercised an all but universal sovereignty. But the difficult nature of the hill passes, and the warlike character of the highland tribes, forbade the growth of great empires, such as succeeded one another on the plains of Hindustán. So far as we can raise the veil of primitive history, we find the land partitioned out among numerous minor dynasties, who rose and fell with, to western minds, a bewildering rapidity. The Tamil country in the extreme south, to which the name of DRAVIDA is alone strictly applicable, is traditionally divided between the three kingdoms of PANDIYA, CHOLA, and CHERA; and the succession of these and other dynasties in Southern India can be somewhat briefly epitomized.

Greek accounts, chiefly based on Megasthenes (300 B.C.), speak of the kingdoms of Kalinga, Andhra, and Pandiya, the last in the extreme south, the two first in the north of the present Madras Presidency, Kalinga on the coast and Andhra inland. To these may be added Chola and Kerala (Chera?), in the time of Asoka (250 B.C.). But by the 6th century A.D. the Pallávas had established a powerful sovereignty with a capital near Madras, but soon split up into several contemporary dynasties ruling along the whole eastern coast as far as Orissa. Both Kalinga and Andhra fell under Pallává sway. Before the culmination of Pallává rule, the Chálukyas of the west had warred against the Cholas and the Pallávas, but without permanent success. In the 7th century the tide of fortune turned. The Chálukyas conquered the Pallávas, and under the name of the Eastern Chálukya dynasties, remained in power until the 11th century. About the same time, the Southern Pallávas of Kánchí or Conjevaram were overthrown by a fresh inroad of the Chálukyas, who, it is very probable, were then the architects of the celebrated 'Seven Pagodas.' The Southern Pallávas, however, regained their power, and the Chálukyas were driven out. In the 11th century the Cholas rose to great importance. They conquered for a time the Pandiyas in the south, the Chera or Gangá dynasty, and the king of Ceylon; while they added to their territory the realm of the Pallávas, and the possessions of the Eastern Chálukyas up to the borders of Orissa.

This widely extended kingdom of the Chálukyas gradually fell

to pieces; and by the close of the 13th century the entire north of the Presidency had been wrested from the Chola sovereign by a number of chiefs under various titles, somewhat resembling the barons of mediæval Europe. Virtually, they were independent, and perpetually at war with one another, thus falling an easier prey to the disciplined armies of the Muhammadans. The Chola king had besides lost all control of the Pandiyan country, and had been driven out of Mysore and the Chera or Gangá country by the powerful dynasty of the Hoysala Ballálas. At the opening of the 14th century, the position of the various dynasties was accordingly this. The Pandiyas were still powerful in the south; the Cholas, only the remnant of a nation, held the territory about Tanjore and Madras; the Hoysala Ballálas had a firm grip on the centre of the peninsula; the north of the Presidency was in a state of anarchy.

Hindu legend has preserved marvellous stories of these early dynasties, but the authentic evidence consists in their inscriptions on stone and copper, and their noble architecture. Continuous history begins with the arrival of the Muhammadans. The Muhammadan invader first established himself in the south at the commencement of the 14th century. Alá-ud-dín, the second monarch of the Khiljí dynasty at Delhi, and his general Málik Káfur, conquered the Deccan, overthrew the kingdom of the Hoysala Ballálas, and ravaged the country down to the extreme south, besides conquering the chieftains of the east coast. After the withdrawal of the Musalmán armies, the Hindu monarchy of Vijayanagar arose out of the ruins, with its capital on the Tungabhadra. This dynasty gradually extended its dominions from sea to sea, and reached a pitch of prosperity such as had been before unknown. It destroyed the former dynasties of Southern India, and nominally governed the entire country now known as the Presidency of Madras. At last, in 1565, after a glorious history of two centuries, Vijayanagar was overwhelmed by a combination of the four Muhammadan principalities of the Deccan. Mughal and Maráthá armies followed in quick succession; and it seemed as if all national life had been crushed out of the Dravidian races.

The Emperor Aurangzeb nominally extended his sovereignty as far as Cape Comorin; but in reality the south had again fallen under a number of rulers, who owned no regular allegiance. The Nizám, himself an independent sovereign, represented the distant court of Delhi. The most powerful of his feudatories was the Nawáb of the Karnátik, with his capital at Arcot. In the plain of Tanjore, a descendant of Sivají ruled in ignoble ease, cut off from the rest of the Maráthá confederacy. The Pandiyan country was held by a powerful family known as the Nayakkas of Madura. On the central table-land, a Hindu chieftain was gradually establishing his authority over his neighbours, and founding

the State of Mysore, destined soon to pass to a Muhammadan usurper. Such was the state of affairs amid which the prophetic mind of Dupleix first entertained the dream of European supremacy in the Peninsula.

Vasco da Gama, the pioneer of maritime adventure, cast anchor off Calicut on the 20th May 1498. For a century, the Portuguese retained in their control the commerce of India, especially along the western coast. The Dutch began to establish themselves on the ruins of the Portuguese at the beginning of the 17th century, and were quickly followed by the English, who opened places of business at Calicut and Cranganore as early as 1616. Tellicherri, a branch factory from Surat, in 1683, became a principal British emporium on the western coast, and was permanently obtained by a cession of territory in 1708. The Portuguese eventually retired to Goa, and the Dutch to the Spice Islands. The first English settlements on the eastern coast were founded in 1611 at Masulipatam, even then celebrated for its fabrics; and at Pettapoli (now Nizámpatam) in Kistna District. To the south, a factory was built at Armagáon, a small port in Nellore District; and in 1639 another factory, the nucleus of the present city of Madras, was erected after permission had been obtained from the Hindu Rájá of Chandragiri. The site of Pondicherri was purchased by the French in 1672, and a French settlement was established two years afterwards. For many years, the English and French traders lived peacefully side by side, rivals only in commerce, and with no ambition for territorial aggrandisement.

The war of the Austrian Succession in Europe (1741) lit the first flame of hostility on the Coromandel coast. In 1746, the weak garrison of Madras surrendered to La Bourdonnais; and Fort St. David remained the only British possession in Southern India. The Nawáb of the Karnátik attempted to drive out the French, but his general was defeated at the decisive battle of St. Thomé. By the peace of Aix-la-Chapelle (1748), Madras was restored to the English; but henceforth the national antipathies were destined to run their course. An excuse was found in the disputed successions which always fill a large place in oriental politics. English influence was generally able to secure the favour of the rulers of the Karnátik and Tanjore, while the French succeeded in placing their own nominee on the throne at Haidarábád.

At last, after many vicissitudes and countless intrigues, the great Frenchman, Dupleix, rose to be the temporary arbiter of the fate of Southern India. His strength lay in his profound insight into the native temperament, and the semi-oriental magnificence of his ambition. But when his ascendancy was at its height, it was suddenly overthrown by the yet greater Englishman, Clive, whose defence of Arcot forms a turning-point in Indian history, and led to the

transfer of preponderance in Southern India from the French to the English. Dupleix was shortly afterwards recalled, to be succeeded by Bussy and Lally, who possessed higher military skill, but less political genius, than their predecessor. In 1760, the crowning victory of Wandiwash, won by Colonel (afterwards Sir Eyre) Coote, over Lally, established the doctrine that one European nation, and that the English, must be supreme in Southern India. In the following year, despite help from Mysore, Pondicherri was captured; and the name of France ceased to awaken disturbing associations in the minds of the natives.

But though the English had no longer any European rival, they had yet to deal with Muhammadan fanaticism and the warlike population of Mysore. The dynasty, founded by Haidar Alí and terminating in his son Tipú Sultán, proved itself in four several wars the most formidable antagonist which the English had yet encountered in India. The Madras Government, then at a low ebb of efficiency, was incapable of offering a successful opposition. On more than one occasion the horsemen of Mysore swept unmolested through the lowlands of the Karnátik, plundering up to the gates of the English forts. The first war was ended in 1769 by a peace dictated by Haidar Alí beneath the walls of Madras. In the course of the second war, an English force under Colonel Baillie was cut to pieces by Haidar near Conjevaram; and Tipú drove the English out of Malabar.

But the disaster near Conjevaram was avenged in the following year by Sir Eyre Coote, who had been despatched by Warren Hastings from Bengal to take command. The victory of Porto Novo, won after a severe struggle, proved that the English were still masters in the open field, though Haidar's superiority in marching power enabled him to escape the worst consequences of defeat. Thenceforth, however, he ceased to be the aggressor, and only struggled to hold what he had won. Haidar died in 1782, at the age of sixty-five. Two years later, Tipú consented to sign the treaty of Mangalore, which stipulated for the restoration of conquests on either side. This patched-up peace, which left Tipú in possession of all the means of offence that he had inherited from his father, continued till 1790. The ostensible reason for a renewal of hostilities was Tipú's cruel devastation of Travancore, but the real cause is to be sought in his inveterate hatred of the English name. Lord Cornwallis, the Governor-General, took the field in person. In 1791, the fort of Bangalore was captured by assault; and in the following year, Tipú only saved his capital by agreeing to a treaty which deprived him of half his dominions, and exacted an indemnity of more than three millions sterling. The intrigues of Tipú with the French republicans led to the fourth and last Mysore war of 1799, which ended in a few months by the storming of Seringapatam, and the death of the Sultán in the breach.

Since the beginning of the present century, Madras has known no regular war. But over such a wide area of territory occasional disturbances have called for measures of military repression. The *pálegárs* or local chieftains in the south clung to their independence after their country was ceded to the British. On the west coast, the feudal aristocracy of the Nairs and the religious fanaticism of the Máppilas (Moplas) have more than once led to rebellion and bloodshed. In the extreme north, the wild tribes occupying the hills of Ganjám and Vizagapatam have only lately learned the habit of subordination. In 1836, the *zamíndárí* of Gúmsur in this remote tract was attached by Government for the rebellious conduct of its chief. An inquiry then instituted revealed the wide prevalence among the tribe of KANDHS of human sacrifice, under the name of *meriah*. The practice was suppressed by a special agency. In the year 1879, the country round Rampa on the northern frontier was the scene of riots sufficiently serious to call for the action of the military authorities.

The territories of the Madras Presidency have been acquired at various dates. In 1763, the tract encircling Madras city, long known as the Jaghire (*jágír*) of the East India Company, and now called Chengalpat District, was ceded by the Nawáb of Arcot. In 1765, the Northern Circars (namely, the present Districts of Ganjám, Vizagapatam, Godávari, and Kistna), out of which the French had been driven, were granted to the Company by the Mughal Emperor; but it was thought desirable to obtain the further sanction of the Nizám, at the cost of an annual tribute of £70,000. Full rights of dominion over the Northern Circars were not acquired till 1823, when the tribute was commuted for a lump payment. In 1792, Tipú Sultán was compelled to cede the Bará Mahál (now forming part of Salem District), Malabar, the Dindigal and Palní *táluks* of Madura, and Kangundi *táluk* of North Arcot. In 1799, on the reconstruction of the State of Mysore after Tipú's death, Coimbatore, the Nílgiri Hills, the rest of Salem District, and South Kánara District (excepting the small portion of that District which was taken from Coorg on the annexation of that State in 1834) were appropriated as the British share. In 1799 also, the Maráthá Rájá of Tanjore resigned the administration of his territory, though his descendant retained titular rank until 1855. In 1800, Anantápur, Karnúl, Bellary, and Cuddapah (Kadapa), known to this day as the Ceded Districts, were made over by the Nizám of Haidarábád, to defray the expenses of an increased Subsidiary Force. In the following year, the extensive dominions of the Nawáb of the Karnátik, extending along the east coast almost continuously from Nellore to Tinnevelli, were resigned into the hands of the British. The last titular Nawáb of the Karnátik died in 1855; but his representative still bears the title of Prince of Arcot, and is recognised

as the first native nobleman in Madras. In 1839, the Nawáb of Karnúl (Kurnool) was deposed for misgovernment and suspected treason, and his territory was brought under direct British administration.

With regard to Native States, the largest, MYSORE, had since 1831 been under the direct administration of the Government of India; but in 1881 it was handed back to its native prince. Of Native States subordinate to Madras, TRAVANCORE and COCHIN represent ancient Hindu dynasties, preserved by British aid from falling under the Muhammadan yoke of Mysore. A joint rebellion was suppressed in 1808; and the history of both States has since been a continuous record of peace and commercial prosperity. PUDUKOTA is the inheritance of a chieftain called Tondiman, who rendered valuable service to the British during their wars in the south. BANGANAPALLI and SANDUR, two petty estates, lie in the centre of two British Districts. The *zamíndárís* of Jaipur (Jeypore) and Vizianagaram are not Native States with independent jurisdiction, but large landed properties under British administration.

People.—From early times the population of the Madras Presidency, or at least of that portion residing in *ráyatwárí* villages, has been enumerated with more or less pretension to accuracy. The first Census, taken in 1822, returned a total of 13,476,923 inhabitants. Between 1851–52 and 1866–67, enumerations were made by the village establishments at intervals of five years. The last of these quinquennial attempts gave a population of 26,539,052. Attempts at enumeration were frequently viewed with suspicion and even alarm by the people, who feared some design on the female population, a new poll-tax, or a military levy. These feelings, it is officially reported, have in recent years given way to indifference; so that one great impediment to an accurate enumeration has now been almost wholly removed.

The Census of 1871, corresponding to that of 1872 in the greater part of the rest of India, was the first enumeration conducted with sufficient care to yield results available for statistical use. But the recent Census—that of 1881—has done its work still more completely, and its figures are the basis of the population statistics in the present edition of *The Imperial Gazetteer of India.* The Census enumerators were in general the village officials, who received no extra remuneration. The final counting was effected on the 17th February 1881, except in a few special tracts; but the staff had been trained in their work for months previously. The total number of enumerators employed was 73,059, a block of 243 houses being allotted to each enumerator. The following tables for 1881 show in detail the area and the number of houses, villages, and inhabitants in each District of the Madras Presidency, with the density of population per square mile. On the

[*Sentence continued on p.* 17.

AREA, POPULATION, ETC. OF MADRAS PRESIDENCY IN 1881; BRITISH DISTRICTS AND BRITISH AGENCY TRACTS.

Taken from the Census Returns.

Name of District.	Area in Square Miles.	Number of Towns and Villages.	Number of Houses.	Population.	Number of Inhabitants per Square Mile.
Ganjám,[1] . . .	8,311	6,895	359,182	1,749,604	210[1]
Vizagapatam,[1] . .	17,380	8,762	550,325	2,485,141	143[1]
Godávari,[1] . . .	7,345	2,249	346,432	1,791,512	244[1]
Kistna, . . .	8,471	1,823	287,812	1,548,480	183
Nellore, . . .	8,739	1,688	254,859	1,220,236	140
Cuddapah, . . .	8,745	1,241	278,331	1,121,038	128
Karnúl, . . .	7,788	836	175,999	709,305	91
Bellary and Anantápur,[2]	11,007	2,084	317,475	1,336,696	121
Chengalpat, . .	2,842	2,003	163,038	981,381	345
North Arcot, . .	7,256	3,967	310,205	1,817,814	251
South Arcot, . .	4,873	2,850	266,729	1,814,738	372
Tanjore, . . .	3,654	3,551	435,838	2,130,383	583
Trichinopoli, . .	3,561	1,485	234,202	1,215,033	341
Madura, . . .	8,401	3,971	451,420	2,168,680	258
Tinnevelli, . . .	5,381	1,497	433,346	1,699,747	315
Salem, . . .	7,653	3,972	344,402	1,599,595	209
Coimbatore, . .	7,842	1,447	390,275	1,657,690	211
Nílgiris, . . .	957	10	21,590	91,034	95
Malabar, . . .	5,765	437	468,825	2,365,035	410
South Kánara, . .	3,902	1,282	200,446	959,514	246
Madras City, . .	27	1	64,550	405,848	15,031
Total, . .	139,900[3]	52,051	6,355,281	30,868,504	220·7

[1] The area of Ganjám District without its Agency Tract is 3106 square miles; the area of Vizagapatam District without its Agency Tract, 3477 square miles; the area of Godávari District without its Agency Tract, 6525 square miles. In Ganjám proper, the density of population per square mile is 484; in Vizagapatam proper, 515; in Godávari proper, 273.

[2] Bellary District has since 1881 been divided into the two Districts of Bellary and Anantápur, making a total of 22 British Districts, instead of 21, as enumerated above. Bellary District, as at present constituted, contains, according to the Census of 1881, an area of 5904 square miles, with 1184 towns and villages, and a population numbering 736,807. Anantápur District has an area of 5103 square miles, with 900 towns and villages, and a population numbering 599,889.

[3] The Census (1881) adds Pudukota territory, which raises the total area to 141,001 square miles; the number of towns and villages to 52,648; the number of houses to 6,429,365; and the total population to 31,170,631.

AREA AND POPULATION OF THE MADRAS NATIVE STATES.

	Area in Square Miles.	Number of Towns and Villages.	Number of Houses.	Population.	Number of Inhabitants per Square Mile.
Travancore, . .	6,730	3,719	524,950	2,401,158	357
Cochin, . . .	1,361	655	125,297	600,278	441
Pudukota, . . .	1,101	597	74,084	302,127	274
Banganapalli, . .	255	64	8,735	30,754	121
Sandúr, . . .	164	23	2,686	10,532	64
Total, . .	9,611	5,058	735,752	3,344,849	348
Grand Total of Madras Presidency,[1] . .	149,092	57,022	7,079,612	34,172,067	229

[1] The grand total figures for area and population do not quite agree with the separate totals, as the Census figures for Karnúl and Bellary Districts in the table on the opposite page also include the petty States of Banganapalli and Sandúr, which are thus shown twice over.

Sentence continued from p. 15.]
whole, the population of the Madras Presidency has since 1871 decreased over the same area by 462,897 persons, or nearly half a million of people. This check to a normal increase of over seven per thousand per annum is due to the famine in Southern India during 1876, 1877, and 1878. In the Districts most severely affected by that visitation, the decrease of population has been 1,751,327, or 12·8 per cent. In the Districts not affected, or but slightly affected, by famine, there has been an increase of 1,288,430, or 7·19 per cent.

The total area and population of the Madras Presidency, including the Agency Tracts and the States of Travancore, Cochin, Banganapalli, Sandúr, and Pudukota, are 149,092 square miles, and 34,172,067 persons. Area and population of the British Districts and British Agency Tracts, 139,481 square miles, and 30,827,218 persons.[1]

Taking the area of the Madras Presidency as dealt with in the Census Report, the following averages are obtained; but as explained in footnotes, the exact totals depend upon the classes of territory included in the enumeration. Density of population per square mile, 221 persons, ranging from 91 in the District of Karnúl to 583 in the fertile delta of Tanjore, and 15,031 in Madras city. Towns and villages per square mile, ·373, ranging from ·01 in the Nílgiris to 1·34 in Ganjám. Houses per square mile, 46 (5 of them returned as un-

[1] Owing to the varying classifications of territory in Madras, the totals obtained from one return do not always tally precisely with those obtained from another. See footnotes to table of population.

occupied). Persons per village, 537; persons per town, 13,335; persons per occupied house, 5·5.

According to sex, there were 15,421,043 males and 15,749,588 females; or in every 1000 of population, 495 males and 505 females. Classified according to age, there were 6,081,142 boys and 5,930,624 girls under 15 years of age; total children, 12,011,766, or 38·5 per cent. of the population: and 9,332,223 males and 9,811,059 females of 15 years and upwards; total adults, 19,143,282, or 61·4 per cent. of the population: age not stated—males 7678, females 7905; total, 15,583.

The religious classification of the people for the same area shows the following results:—Hindus, as loosely grouped together for religious purposes, 28,497,666, or 91·42 per cent., varying from 99½ per cent. in Ganjám to 70½ per cent. in Malabar; Muhammadans, 1,933,571, or 6·2 per cent., being most numerous on the Malabar coast, in Madras city, and the Ceded Provinces; Christians, 711,072, or 2·28 per cent.; Jains, 24,962; and 'others,' 3360.

Classified by 'nationality,' there were in every ten thousand of the population, 9369 Hindus (including Buddhists, Jains, and native Christians), 620 Muhammadans, 7 Eurasians, 3·5 Europeans, and 0·5 'others.' Since 1871, the Hindus have decreased by 1·75 per cent., due mainly to famine; the Muhammadans have increased by 3·56 per cent., said to be owing to conversions in Malabar; Europeans appear to have decreased by 25·98 per cent., owing to a temporary reduction of the garrison; and although Eurasians appear to have decreased by 17·09 per cent., the decrease is not accurately shown owing to defective enumeration in Malabar.

Ethnical Classification.—Broadly speaking, the population of the Madras Presidency may be described as belonging to the five races of the great Dravidian stock dominant throughout Southern India. At an early period, before the dawn of history, these non-Aryan races appear to have accepted some form or other of the Bráhmanical or Buddhist faiths. Many storms of conquest have since swept over the land, and a few colonies of Mughal and Maráthá origin are to be found here and there. But the indelible evidence of language proves that the ethnical character of the population has remained stable under all later influences; and that the Hindu, Muhammadan, Jain, and Christian of Madras are all of the same stock. Of the five Dravidian dialects (Tamil, Telugu, Malayálam, Kánarese, and Tulu), the Census returns Telugu as spoken by 12,104,246 persons, inhabiting the tract stretching southwards as far as Nellore and inland to Karnúl; Tamil, by 12,387,395 persons, occupying the remainder of the eastern coast from Madras city to Cape Comorin; Kánarese, by 1,300,555 persons, in the Central Districts surrounding Mysore and in South Kánara; Malayálam, by 2,369,671 persons, chiefly in Malabar

District (besides the population of the Native States of Travancore and Cochin); and Tulu, by 427,044 persons, most of them in a portion of South Kánara. For the rest, Uriyá is the native tongue in the extreme north of Ganjám, bordering on Orissa; and various sub-dialects of Dravidian origin (*e.g.* Toda, Kota, Kodagu) are used by the hill tribes of the Eastern Gháts, of whom the Kandhs may be taken as the type. In all, 28,853,224 out of the whole population of 31,170,631 (or 92·56 per cent.) are Dravidians as to language.[1]

Castes.—According to the classification of the Census Report, the Bráhmans, who, with the Kshattriyas, alone represent an Aryan element in the population, number 1,122,070 persons, or 3·94 per cent. of the total Hindu population. They follow various pursuits, and are distributed with extreme irregularity, being proportionately most numerous in South Kánara and Tanjore. Many of them are modern immigrants, who came south in the train of the Maráthá armies. In Malabar is found a peculiar class called Nambúri Bráhmans, whom local tradition asserts to be descended from a race of fishermen, and who are regarded with unusual reverence by their neighbours. The Kshattriyas, or warrior caste of the primitive Hindu system, number only 193,550, the principal sub-divisions being the Bondiliars and the Bhát Rájás. Many of the trading class claim to be Vaisyas, and wear the sacred thread. The trading castes number 640,047, or 2·25 per cent. of the total, returned under the heads of Shettis, Beri Shettis, and Komatis (365,715). Except in South Kánara, they still retain in their hands the greater part of the trade of the country. The number of Marwárís, the enterprising traders of Western India and Rájputána, is 382.

The agricultural castes number 7,767,463, or 27·25 per cent. The highest class among them, named Velama in the Telugu country, Vellálar in the Tamil Districts, Bant and Nadavar in South Kánara, and Nair in Malabar, belong to the well-to-do ranks of the community. They do not usually cultivate with their own hands, and many of them formerly held their lands on a military tenure. The Madras Nairs number 335,320; and 907 more are found in Coorg.

The pastoral castes, called Idaiyar in Tamil and Golla in Telugu, number 1,580,000, or 5·54 per cent. of the total, most numerous in the inland Districts of Bellary and Karnúl (Kurnool). They are chiefly Vishnuites, but a few are Sivaites, and some are demon-worshippers. A large proportion of them have abandoned their hereditary occupation of shepherds.

The artisan castes, called Kamálar in Tamil and Kamsála in

[1] These totals include the territory of Pudukota, as mentioned in a footnote to the Table of population on a previous page. The difficulty in regard to the Madras totals has already been referred to.

Telugu, number 849,901, or 2·98 per cent. of the total, of whom nearly one-half are workers in metals. The bulk are Sivaites. They have succeeded generally in maintaining a higher position in the social scale than is awarded to them in Northern India. The weavers (Kaikalars) number 979,062, or 3·44 per cent. of the total. They were once a much more important section of the community, but they have been unable to withstand the competition of piece-goods from Manchester. Many of the weaving castes adopt the Lingáyat creed.

The labouring castes number 3,751,093, or 13·16 per cent. of the total; very few in the Telugu country. In the south, the Vannians or Naiks (1,075,505) supply the bulk of agricultural labour. The Maravars and the Kallans, whose acknowledged head is the Rájá of Pudukota, bear a bad reputation for thieving and general lawlessness. The Kanakkan, or writer and accountant class, number 102,472. The term '*Conicopollies,*' applied to agents, purveyors, and other traders, is a corruption of 'Kannakanpillai,' a word formed from the name of this caste. 'Pillai' is a title of respect. The Kannakans are very irregularly distributed. The Upparavas (104,985) are chiefly engaged in the manufacture of salt and saltpetre, the Wadavars in tank-digging and road-making. The fishing and hunting castes, called Shembadavan in Tamil and Besta in Telugu, number 873,448, or 3·01 per cent. Many of them have now betaken themselves to agriculture. The palm cultivators and makers of toddy (Shánáns) are very numerous in those Districts where the date, palmyra, and cocoa-nut flourish; but they are likewise largely engaged in general agriculture and farm labour, and in the production of coarse sugar (jaggery); their total reaches 1,621,111, or 5·69 per cent. of the total. They are clearly of aboriginal descent, and are, as a rule, demon-worshippers. The Kushávans, or potters, number 263,975, or 0·93 per cent. of the total; Ambattans, or barbers, 348,390; and Vannáns, or washermen, 528,535. The Satánís, or mixed castes, are returned by the Census at 625,455, or 2·2 of the total. Under them are included temple servants, actors, dancers, and prostitutes. The Bairágis, who are enumerated as a mixed caste numbering 9019, are ascetics and mendicants from Northern India. Dasí (47,185) and Nágavásalu (12,408) are dancing girls. Kuttadies (4546) are actors and dancers.

The outcastes proper of the Madras Presidency, whose Tamil name of Pariah has been very generally adopted into European languages, are called Mala in Telugu, Holia in Kánarese, Paliyár in Malayálam, and Dheda in Maráthí. They number in all 4,439,253, or 15·58 per cent. of the total, being thus four times as numerous as the Bráhmans. In the country round Madras they amount to about one-quarter of the population. Up to the close of the last century, they lived in a state of slavery to the superior castes; and they are still compelled by

custom to dwell in separate hovels outside the boundary of the village, and to perform all menial services. They are described as a laborious, frugal, pleasure-loving people, omnivorous in diet, and capable of performing much hard work. Despite their absolute exclusion from the Hindu social system, the Pariahs returned themselves under more than 1000 caste sub-divisions in the Census Report for 1881. In that Report, 73 are returned as 'frog-eating Pariahs.'

The unclassified Hindus, numbering 2,811,841, or 9·84 per cent. of the total, consist of aboriginal races and wandering tribes. They are found chiefly in the northern hill Districts and on the Nílgiris, in which last District they form more than half the population. Numerically, the most important tribes are the Kandhs (205,045), and Sauras or Savars (132,931), two cognate races of Dravidian origin who inhabit the mountainous tracts of the Eastern Gháts attached to several of the large *zamíndárís* of Ganjám and Vizagapatam. On the Nílgiris, the tribe best known to Europeans is the Todas, a stalwart, haughty race, of a Jewish type of feature, who domineer over the more timid jungle folk, and confine themselves to the pasturing of buffaloes. It is believed that the Todas are now dying out, for at the time of the Census in 1881 they numbered only 689 persons. Like the Nairs, the Todas are, or were lately, addicted to a form of polyandry. The principal wandering tribes are the Brinjaras and Lambadis, who are to be found in all parts of the country as carriers of grain and salt. The Karuvar races (numbering 55,645) wander over a wide area in Nellore and the adjacent Districts, and constitute one of the chief criminal classes.

Throughout the whole of Southern India, sect exercises a social influence second only to caste, and caste itself often appears to be founded upon the most arbitrary distinctions, unknown to the law-books of the Hindus. Thus, in Madras, a broad line of sectarian division separates the community into members of the right-hand and left-hand factions.[1] The origin of this strange division is obscured by fable, but at the present day it often occasions disturbance at public festivals. Some weavers are found in the one faction, some in the other; the fisherman sides with the right hand, the hunter with the left; the agricultural labourers range themselves on the right, while their wives are reported to frequently attach themselves to the left. With the shoemakers this division of the sexes is said to be often reversed.

Religious Classification. — The Hindus in 1871 numbered on the present area of the Madras Presidency over 28¾ millions, or 92·3 per cent. of the population, and were, in the 1871 returns, sub-divided according to their forms of worship into 16,421,219 Sivaites, 11,691,860 Vishnuites, 155,658 Lingáyats, and 892,070 'others,' including hill tribes.

[1] See Census Reports of 1871 and 1881, and Mr. Crole's *Manual of the Chengalpat District*, pp. 33, 34 (1879).

The same sub-division has been attempted in the Census of 1881, and the numbers for that year were as follow:—Sivaites, 15,399,686; Vishnuites, 10,494,408; Lingáyats, 64,580. This leaves a balance of about 2½ millions for 'others;' total Hindus in 1881, 28½ millions. The Sivaites number over one million in each of the Districts of Tanjore, Madura, Tinnevelli, Salem, Coimbatore, and Malabar; and the Vishnuites over a million in Vizagapatam, Godávari, South Kánara, and Madras City. But beyond a broad demarcation for general purposes, the Census authorities in 1881 preferred a classification based on the Hindu social distinctions of caste which forbid inter-eating and inter-marrying, rather than on religious or sectarian distinctions. The Sivaites may be said, however, to be most numerous in the extreme south and on the west coast; the Vishnuites are chiefly found in the northern Districts.

The Lingáyats of the Madras Presidency may be regarded as an heretical sect of Sivaite puritans. Their distinctive tenets are the unity of the godhead in Siva, the repudiation of Bráhman pretensions, and the absence of all caste distinctions. They show a high respect for women. They derive their name from their characteristic practice of carrying about on their persons the *linga* or emblem of Siva. The Lingáyats never extended north of the Deccan. They are very numerous in the west of Mysore, where they have almost a monopoly of trade; but they also extend their operations into Madras and the southern Districts of Bombay. The number of Lingáyats in Mysore in 1881 was 470,269; in Madras, 64,580; and in Bombay, 369,004.

The Jains, who are commonly regarded as a surviving offshoot of the Buddhism once predominant throughout the whole peninsula, number only 24,962 in Madras, being chiefly found in the two Arcot Districts and South Kánara. Like the Lingáyats, their present head-quarters are in the neighbouring State of Mysore. The leading tenets of the Jains are reverence for certain sanctified ascetics, respect for every form of animal life, and denial of the infallibility of the Vedas.

The Muhammadans, who number in all 1,933,571, or 6·2 per cent., are in the Census of 1881 thus sub-divided according to sect:—Sunnís, 1,758,376, or 91 per cent. of the total; Shiás, 44,378; Wahábís, 1020; Faráizís, 82; and 'others,' 129,715. The more familiar division is into the following races:—Labbay, Máppila, Arab, Shaikh, Sayyid, Pathán, and Mughal. The Labbays (30,162) are properly the descendants of Tamil converts to Islám; the name, however, is also used to signify descendants of foreign traders—Arabs, or Persians—by Indian women. Taken in the broader sense, they number 515,440, or 26·6 per cent. of the total, nearly all found in the extreme south in Tanjore and Madura; the majority still follow their hereditary occupation of trade

while some have become sailors and fishermen. Their chief city of resort is Negapatam.

The Máppilas or Moplás are the descendants of native Malayálam converts to the Muhammadan creed. The head of the Máppilas, the Rájá of Cannanore, is descended from a fisher family in Malabar. A seafaring life, trade with Arabia, and Arab missions, led to extensive conversion amongst the Malabar fishing races. At one time, after the European nations appeared in Eastern seas, conversion was largely promoted by the Zamorin of Calicut, with a view to procure seamen to defend the towns on the coast. Subsequently, forcible conversion was attempted by Tipú Sultán, with no great results. Thousands of Hindus were removed to Mysore, but few returned, and those who did, for the most part relapsed into Hinduism; but, having partaken of beef and been circumcised, they could not be received back into their castes. They are now recognised as a separate caste, professing Hinduism. The Máppilas are almost confined to the tract between the Western Gháts and the sea. They number 495,738, or 25·6 per cent. of the total, 495,248 being found in the single District of Malabar. They are fishermen, sailors, and coolies, except in the inland *táluks* of Valuvanád and Ernád, where they are cultivators. The Máppilas are a hardworking, frugal people, but uneducated and very fanatical; and, under the influence of religious excitement, they have often been a source of danger to the public peace. Further particulars of this sect will be found in the article on MALABAR DISTRICT. The Shaikhs and the Sayyids represent the Musalmán element from the north, together with descendants of converts made during the period of Muhammadan supremacy. Patháns, numbering 15,401, and Mughals 1229, are also descended from the invaders.

Christians are more numerous in Madras than in any other part of India. In 1871, they numbered in the British Districts 533,760, or 1·71 per cent. of the total. In 1881, their number had reached 711,072; so that the Christian population of Madras Presidency has, since the Census of 1871, a period of ten years, increased by 30·39 per cent. In the protected States of Travancore and Cochin, the native Christians are still more numerous than in the British Districts, constituting as much as one-fourth of the total population. The Church of England in the south, and the Baptists in Nellore and Kistna, have made great advances of late years; but the Roman Catholic Missions, founded three and a half centuries ago, have still the strongest hold on the country, and their activity is both continuous and widespread. Roman Catholics represent 25·25 per cent. of the Europeans in Madras Presidency, 37·66 per cent. of the Eurasians, and 68·68 per cent. of the total Christian population of the Presidency.

The following table shows the classification of the Protestant bodies in the Madras Presidency:—

Denomination.	Adherents.
Church of England,	140,877
Baptists,	37,132
Lutherans,	29,874
Congregationalists,	18,840
Independents,	3,565
Presbyterians,	2,177
Wesleyans,	1,743
Methodists,	264
Unitarians,	43
Total,	234,515

The Church of England thus claims nearly two-thirds of the Protestant Christians. It is most strongly represented in Tinnevelli, Madras City, and Karnúl. Its agencies are the Society for the Propagation of the Gospel, and the Church Missionary Society. The vast majority of the Christian population of the Presidency (711,072) are Hindu converts, or the descendants of Hindu converts. Excepting the Roman Catholic Christians of the west coast, they belong for the most part to the poorer classes, and are drawn from the lower castes.

The Christian population did not appreciably suffer from the famine of 1876–78. In every District but one they numerically increased. It is believed that the occasion was particularly favourable to missionary effort, and the number of converts is believed to have been largest in the worst period of the distress. In Madras City there are nearly 40,000 Christians, subdivided into 18 sects. Two curious features were noticeable during the enumeration of the Christian population in 1881. Over 800 inhabitants of Madras City, including 22 Europeans, and over 18,500 native Christians throughout the Presidency, professed Christianity but were not able to decide to what sect they belonged. More curiously still, over 114,000, or one-sixth of the total Christian population, were unable (or reluctant) to state whether they were Europeans, Eurasians, or natives. Notwithstanding the presence of nearly 11,000 (10,842) Europeans, among whom the proportion of females is less than that of males, female Christians bear a high proportion to male Christians, namely, 509 females to 491 males in every thousand. Omitting Europeans and Eurasians, the proportion is 512 females to 488 males. Comparing the Christian population of Madras Presidency with that of other Provinces, it is found to be the most numerous of all. In 1881, there were 228 out of every 10,000 people in Madras professing Christianity; in British Burma, 225; in Coorg, 177; in Bombay, 62; in Bengal, 18; in the Punjab, 15; in Assam, 15; in the North-Western Provinces and Oudh, 11; and in the Central Provinces, 10.

The history of Christianity in Southern India is full of interest. The Syrian Church of Malabar claims to have sprung from the direct teaching of St. Thomas the Apostle. A Syriac MS. of the Bible, brought from Cochin and now in the Fitz-William Library at Cambridge, is plausibly assigned to the 8th century. A Pahlavi inscription, in the ancient church of the Little Mount, near Madras, indicates an early settlement of Manichæan or Nestorian Christians on the eastern coast as well as the west. The Census of 1871 returned only 14,335 'Nazaranis,' and that of 1881 only 5 'Nazaranis,' in the Madras Presidency. But in Travancore the Syrians numbered 300,000 in 1871, and 287,409 in 1881; and in Cochin, 40,000 in 1871, and 14,033 in 1881. Some of them are Catholics of the Syrian rite; the others still acknowledge the jurisdiction of the Jacobite Patriarch of Antioch.

The Southern Districts have long been strongholds of Christianity. St. Francis Xavier, Nobilis, Beschi, Schwartz, Jaenicke, are names associated with the raising up of the Christian Churches in the south. Early in the 16th century there were Catholic communities near Cape Comorin, and the influence has spread and is spreading upward. The Roman Catholics, whose number throughout all Southern India is reckoned at more than 650,000, owe their conversion to two distinct waves of enthusiasm in the 16th and 17th centuries. The first is associated with the great name of St. Francis Xavier, who is to this day the patron saint of the Madras fishermen; the other was effected by the scarcely less celebrated Jesuit Mission of Madura. The Protestant missions date from the beginning of the last century. The Danes were here the pioneers of missionary enterprise; but their work was taken up in 1727 by the Society for Promoting Christian Knowledge, under whom laboured the great Lutherans of the last century—Schultze, Sartorius, Fabricius, and Schwartz. The Church Missionary Society entered the field in 1814; and many other bodies, English, Scotch, and American, now join in the task of conversion. The history of Christianity in India, and the progress of Christian missions, are fully dealt with in chapter ix. of article INDIA, in volume vi. of this work.

Occupation.—The Census of 1881 distributed the male population of Madras into six main groups:—(1) Professional class, including officials of every kind, and members of the learned professions, 411,118; (2) domestic servants, inn and lodging-house keepers, 116,888; (3) commercial class, including bankers, merchants, carriers, etc., 350,743; (4) agricultural and pastoral class, including shepherds, 6,930,173; (5) industrial class, including all manufacturers and artisans, 1,938,370; and (6) indefinite and non-productive class, comprising labourers, male children, and persons of unspecified occupation, 5,673,751. The Census returned as workers 66·94 per cent. of the total males, and 41·90 per cent. of the total females; that is to say, 66·94 per

cent. of the males had definite occupation. In every 1000 of the working population there were 610 males to 390 females. Roughly speaking, females took part appreciably only in the domestic, agricultural, industrial, and indefinite labour classes.

Emigration.—The inhabitants of Southern India are not so obstinately attached to their homes as in some other parts of the peninsula. A regular tide of emigration sets from the Madras Presidency towards Ceylon every year, and is mutually advantageous to both countries. Official returns show that an annual average of more than 70,000 Tamil coolies pass over into Ceylon to find work on the coffee plantations; and though the great majority return when the season has closed, it is estimated that about 166,000 persons permanently settled in Ceylon during the ten years ending 1871. In the famine year of 1877, this emigration assumed unusual proportions, and acted as an important relief to the labour market; in 1876–77, the number was 184,919; and in 1877–78, 152,073. In 1881–82, the number of emigrants to Ceylon was 46,594. The number of Tamils found in Ceylon who are stated to have had 'their origin in Madras Presidency,' is 256,611. Similarly, a certain number of Telugu emigrants from the northern Districts, including a considerable proportion of women, annually cross the Bay of Bengal to Burma. In 1881, the number of Madrasís living in British Burma was 74,430, namely, 62,348 males and 12,082 females; of whom 35,058 spoke the Tamil and 33,715 the Telugu languages. Emigration to the more distant labour markets of Mauritius, Natal, British Guiana, and the West Indies is less popular. During the ten years ending 1871, a total of 55,574 persons left Madras ports for those places; and in the same period, 8884 persons returned. During the ten years ending 1882, only 20,415 coolie emigrants left Madras for these places. The majority of the coolies proceed to Mauritius, which is the only British colony employing a recruiting agent in the Presidency; but a few are attracted to the French colonies of Réunion, Guadaloupe, etc.

Houses and Towns.—Out of the total number of 6,429,365 houses returned in 1881, 717,834 were shown as unoccupied. In the Districts afflicted by the famine of 1876–78, the occupied houses have fallen off, during the ten years between 1871 and 1881, by 12 per cent.; while over the same region the population, under the pressure of famine, has fallen off 13 per cent. The villages and towns are thus arranged in the Census of 1881:—With fewer than 200 inhabitants, 21,559; with from 200 to 500, 14,067; with from 500 to 1000, 9379; with from 1000 to 2000, 5042; with from 2000 to 3000, 1291; with from 3000 to 5000, 813; with from 5000 to 10,000, 404; with from 10,000 to 15,000, 48; with from 15,000 to 20,000, 15; with from 20,000 to 50,000, 21; with above 50,000, 9. On the whole, as com-

pared with Bengal or Bombay, urban life may be said to be more highly developed in Madras. Populous cities, indeed, are not numerous; but there is an unusual proportion of towns with from 2000 to 20,000 inhabitants.

In 1871, eight cities had a population of over 50,000. In 1881, the following nine towns had a population of more than 50,000:—MADRAS CITY, 405,848; TRICHINOPOLI, 84,449; TANJORE, 54,745; MADURA, 73,807; BELLARY, 53,460; CALICUT, 57,085; NEGAPATAM, 53,855; COMBACONUM, 50,098; SALEM, 50,667. Forty-eight towns in the Presidency, including Madras city, have been placed under municipal administration, with an aggregate of 1,729,818 inhabitants, or over 5 per cent. of the total population.

Agriculture.—The Madras Presidency can scarcely be regarded as a naturally fertile country. The greater part of its surface is covered with soils which were originally formed by the disintegration of metamorphic and igneous formations. Over the greater part of its area, too, artificial irrigation is impossible; and cultivation is dependent upon the local rainfall, which rarely exceeds 45 inches in the year, and seems liable to fail both irregularly and at recurrent intervals. The rainfall in the irrigation region varies from 34 to 36 inches.

The soil may be roughly classified into three varieties—(1) the well-known *regar* or black cotton-soil, met with in isolated patches or far-reaching plains all over the Presidency; (2) red soil, deriving its colour from an admixture of the peroxide of iron, which is also very widely spread, and presents every degree of fertility and barrenness; and (3) grey soil. The depth of the cotton-soil varies from 12 inches to 12 or 15 feet. It is said to represent the deposits or site of dried-up lakes. In Madras Presidency, the cotton-soil does not contain more than 4 per cent. of organic matter.

But the prospects of the cultivator are determined less by the character of the soil than by the facilities for irrigation. The Malabar coast is the only part where the natural rainfall, brought by the south-west monsoon, may be trusted both for its amount and its regularity. Other Districts, such as Bellary, are also dependent upon this monsoon; but in their case the rain-clouds have spent themselves in passing over the barrier range of the Western Gháts, and cultivation becomes a matter of hazard. Throughout most of the Presidency, the rainy season is caused by the north-east monsoon, which breaks towards the end of September. The seed is sown in October, and the crop harvested in February. But in some Districts, the crops are raised under the influence of the south-west monsoon, and here the sowing is performed in April and May, and the reaping in August and September.

Irrigated land forms (1882) over 20 per cent. of the cultivated area.

The irrigation is derived from rivers, river channels, and tanks; the water flowing upon the land by force of gravitation. The area irrigated directly from rivers is extremely small compared with the area irrigated by channels, because the beds of the rivers in the plains are situated in deep valleys or are frequently changing their course. Hence the practice of putting dams (*anicuts*) across rivers. The dam, besides storing the water, raises its level to the required height. Eighty per cent. of the food-producing area of the Presidency is dry land. Cotton and *cholam* (Sorghum vulgare) are grown on the *regar* or black soil area; various cereals and cotton cover the red soil area; the grey soil produces millets, *varagu* (Panicum miliaceum), *koralu* (Panicum italicum), and inferior sorts of *cholam.* The fortunate deltas of the three great rivers—the Godávari, Kistna, and Káveri (Cauvery)—are the principal spots along the eastern coast which artificial irrigation is able to save from all risk of occasional scarcity.

The *ráyatwárí* system of land administration permits the collection of agricultural statistics in a fairly satisfactory form. Out of a total in 1881 of nearly 90 million acres, information is available for about 75 millions. Of these, 24 millions are returned as *parambok* or uncultivable, and 22 millions as cultivable waste, leaving 29 millions as actually under crops. Of the total cultivated area, roundly 20 million acres (exclusive of the permanently settled estates, for which no statistics are available), 82·04 per cent. are under food-grains, 4·44 per cent. under oil-seeds, 2·82 per cent. under orchard and garden crops, 6·38 per cent. under cotton and other fibres, 1·92 under indigo, and 2·4 per cent. under drugs and spices, starches, and miscellaneous produce. The principal food staples are rice, *cholam*, *kambu*, *ragí* (Eleusine corocana), and *varagu.* Rice is chiefly grown in the alluvial plains of Tanjore, Godávari, and Kistna, and in the lowlands of Malabar and South Kánara. Rice is cultivated almost exclusively under the tank system, which is widely spread and very profitable. The revenue derived from wet cultivation under tanks (about 50,000 in number) is estimated at from £800,000 to £1,000,000. *Cholam* covers the table-lands of Anantápur, Bellary, and Karnúl; while *ragí*, the staple of Mysore, is extensively grown in other inland Districts, such as Salem and Coimbatore. The most common oil-seed is gingelly (Sesamum), which is largely used for local consumption, and is also exported.

Garden crops comprise tobacco, largely grown on the islands of the Godávari and Kistna, and in the Districts of Coimbatore, Karnúl, and Salem; sugar-cane, chiefly in Godávari, North and South Arcot, Trichinopoli, Coimbatore, Bellary, and Cuddapah; chillies, betel-leaf, and plantain,—all very widely distributed. The following are the statistics for special crops. In 1882–83, the area under cotton in

the Madras Presidency was 1,682,298 acres; the increase since 1875-76 being 70,380 acres. In 1882-83, the largest cotton area was in Tinnevelli District (342,939 acres); in 1875, the largest cotton area was in Bellary District (385,596 acres). In 1875-76, the total area under indigo was 304,676 acres, including 62,800 in Cuddapah, 61,000 in South Arcot, 57,000 in Nellore, 43,000 in Kistna, and 40,000 in Karnúl. In 1882-83, the area under indigo was 518,468 acres, or an increase since 1875-76 of 213,792 acres, or nearly twofold. In 1875-76, Cuddapah (Kadapa) was the great indigo-growing District; it still has a large cultivation (87,772 acres); but Kistna, with 122,593 acres under indigo in 1882-83, holds rank as the premier indigo-growing District in the Presidency. In 1875-76, the total area under coffee, 53,000 acres, was almost entirely confined to Malabar (33,000) and the Nílgiris (16,000). In 1882, the area under coffee cultivation was 61,481 acres, of which 31,015 acres lay in Malabar District, and 19,851 acres in the Nílgiri Hills. The principal fruit-trees are the cocoa-nut, areca-nut, date and palmyra palms, jack, tamarind, and mango. The cocoa-nut flourishes luxuriantly on the banks of the backwaters and lagoons in Malabar, while the areca-nut palm is found in the greatest perfection in the lower valleys of the Western Gháts.

According to the official principle of classification, the cultivated area is divided into 'dry,' 'wet,' and garden lands. 'Dry' lands, or those which are solely dependent upon local rainfall, cover about 77 per cent. of the total; 'wet' lands, which are those irrigated from river channels or tanks by the natural flow of the water, about 20 per cent.; and garden lands, which are irrigated by water artificially raised from wells, etc., about 3 per cent.

On 'dry' lands, the cultivation is of a simple character. Before sowing, the field is ploughed several times in transverse directions; but the native plough seldom penetrates to a greater depth than 3 inches. The seed is generally scattered broadcast from the hand, but sometimes a rude bamboo drill is used. Occasionally, two or even three crops are sown on the same field at the same time, in the hope that at least one may succeed.

'Wet' lands are from their position fertile, apart from the advantages of irrigation. The usual crop is rice, which is sometimes sown broadcast in a soil worked up into a semi-liquid state, and sometimes transplanted. Water is supplied as often as it can be obtained, daily if possible; and on each occasion of watering, the land is flooded to the depth of 1 or 2 inches. Manure is applied wherever available. There is no established system of rotation of crops, but the principle is recognised that the resources of the soil must not be overtaxed. Exhausting crops are never grown for more than two years in

succession; and the working of the *ráyatwárí* system, by permitting the relinquishment of holdings, encourages occasional fallows. After the crop has been sown, little hoeing or weeding takes place. The harvest is gathered by hand, the labourers being paid in kind.

On garden lands, irrigation is practised on an elaborate scale. Three methods of raising the water are adopted, according to the height of the field above the source of supply. For low lifts a bucket is used, swung on a rope; this is raised and lowered by two men, while a third upsets it over the field. For higher lifts, up to 12 feet, the *picottah* is used. This ingenious but simple machine is identical with the lever lift of Egypt. A horizontal pole is balanced upon an upright post; on one end the bucket is suspended; the counterbalancing weight at the other end is usually supplied by a man who walks along the pole, but sometimes by a lump of clay. The third form of lift, the *kavalay*, will raise water from wells 40 feet deep. This consists of a leathern bucket, attached to a rope, which runs over a roller, and is worked by a pair of oxen moving up and down an inclined plane.

The area under cereals in 1881–82 was 15,377,168 acres, distributed as follows:—Rice, 5,423,755 acres; great millet or *cholam* (Sorghum vulgare), 3,242,914 acres; spiked millet or *kambu* (Pennisetum typhoideum), 2,319,824; *ragí* (Eleusine corocana), 1,408,250; *varagu* (Panicum miliaceum), 1,312,890; maize, 89,239; wheat (Triticum sativum), 23,210; and other cereals, including Italian millet, *chenna*, barley (only 16 acres), *korali*, and *ganjí*, 1,557,086. The area under pulses was 1,561,077 acres, distributed as follows:—Gram (Dolichos biflorus, Phaseolus Mungo, Phaseolus radiatus, Cajanus indicus, and Cicer arietinum), 1,346,055 acres; peas, 3998; lentils, 1461; and other pulses, 209,563. The area under garden produce was 582,597 acres, distributed as follows:—Plantains, 31,812 acres; cocoa-nuts, 69,921; *babúl* trees, 42,632; vegetables, 17,276; *brinjáls*, 7746; mangoes, 15,663; jack, 1208; casuarina, 20,123; guavas, 393; pumpkins, 2968; and 'others,' 372,855. The area under drugs and narcotics was 173,641 acres, distributed as follows:—Tobacco, 89,228 acres; coffee, 70,296; opium, 186 (only in Kistna District); cinchona, 1846, grown wholly in the Nílgiris District; senna, 1894 (only in Tinnevelli); hemp, for narcotic preparations, 2169 acres; besides other drugs. Under condiments and spices, there were 245,807 acres, of which chillies occupied 123,819 acres; coriander seeds, 50,967; betel leaves, 11,109; areca-nuts, 13,317; tamarinds, 7995; pepper, 10,083; onions, 8045; and 'others,' 20,472. Starches occupied 15,164 acres, chiefly under potatoes; sugar occupied 62,516 acres; oil-seeds, 917,002 acres (including 388,155 acres under sesamum or gingelly, 209,493 under castor-oil plant, 55,207 under rape seed, 8062 under

linseed, 2995 under mustard seed, 71,163 under ground nuts, and 81,927 under miscellaneous oil crops). Indigo occupied 389,547 acres; saffron, 3078 acres; *nona* (Anona reticulata), 2890; and other dyes, 885; total under dyes, 396,400 acres. Fibres occupied 1,316,655 acres; the number of acres under cotton being 1,302,537.

Coffee Plantations.—The principal coffee tract in Southern India stretches along the slopes of the Western Gháts, from the north of Mysore almost down to Cape Comorin. Coffee was originally introduced into India by a returned pilgrim from Mecca. The larger portion of this area lies in the States of Mysore, Coorg, and Travancore; but the Sub-division of Malabar District known as the Wainád (Wynaad) and the Nílgiri Hills are within the limits of Madras Presidency. Coffee cultivation has also been successfully introduced on the Shevaroy Hills in Salem, the Palní and Sirumalai Hills in Madura, and in Tinnevelli District.

The first regular coffee plantation in the Wainád, under English management, was opened in 1840 by Mr. Glasson; but previously Major Bevan had grown the plant as a curiosity in the same District. Many of the early clearings, which were made on bamboo or grass land, proved unprofitable, and have now relapsed into jungle. The enterprise made little progress until about 1855, when many estates were taken up in South Wainád. In 1856–57, the total exports were only 32,000 cwts. In 1862, the returns showed nearly 10,000 acres under coffee cultivation, and in 1865 there were 200 estates covering 14,613 acres. An official inquiry in 1868 returned 30,000 acres under coffee, of which 21,000 were held by Europeans, and 9000 by natives; the exports were 128,000 cwts. In 1878, there were throughout the Wainád 32,000 acres containing mature plants, and 10,000 containing immature plants; while there was an additional 27,000 acres of land taken up for coffee plantation and in process of plantation. In 1883, the cultivation amounted to 13,483 plantations, covering an area of 48,725 acres, of which 22,027 acres were under mature plants, 2698 acres under immature plants, and 24,000 acres were taken up for plantation, but not planted. The approximate yield was 306,841 cwts., or an average of 159 lbs. per acre of mature plants. In 1875–76, the total export of coffee from the Madras Presidency was 381,176 cwts., valued at £1,661,110; and in 1883–84, the export was 374,673 cwts., valued at £1,570,191.

About 25 years ago, the area under coffee in the Nílgiris did not much exceed 500 acres; now (1883) it is nearly 20,000 acres. This increase, entirely the result of private enterprise, has added greatly to the prosperity of the Nílgiris, and has at the same time benefited the Districts adjoining. In the establishment of the Nílgiri coffee estates,

a property has been created worth about £500,000 on which the annual expenditure is not less than £200,000, one-third of it being distributed among the coolie labourers of the plantations. Besides the Nílgiris, coffee cultivation is carried on on the Shevaroy Hills of Salem, where nearly 6000 acres are under crop; on the Palní and Sirumalai Hills in Madura, where nearly 2000 acres have been planted; in Tinnevelli and Coimbatore Districts, where there is an aggregate area under the plant of about 3000 acres; and in Malabar District, about 31,000 acres; making a total of 61,481 acres in 1882-83.

The total area under coffee in 1879 in the south of India, including the States of Mysore and Travancore as well as the Madras Presidency, was as follows:—Under mature plants, 574,951 acres; under immature plants, 146,251 acres; taken up for planting and in process of plantation, 43,821 acres. The total approximate yield for the year was 12,806,195 lbs., or an average of about 110 lbs. an acre.

Tea Plantations.—The tea plant was introduced on the Nílgiri Hills about 45 years ago; but although the experiment was successful, it was not taken up as a commercial speculation until 1865. Even at present, the tea-gardens are on a small scale, rarely exceeding 50 acres; and they are generally worked in subordination to an adjoining coffee estate. The plants include the China variety, the Assam variety, and the hybrid between the two. The hybrid is perhaps the most profitable, combining the leaf-producing quality of the one with the hardiness of the other. There were in 1878, 1907 acres under mature plants, 1362 under immature plants, and 3681 taken up for planting and in process of plantation; the approximate yield was 226,389 lbs., or 118 lbs. per acre. In 1883-84, there were in the whole of the Madras Presidency 86 tea plantations, with 3386 acres under mature plants, 1456 acres under immature plants, and 7032 acres taken up for planting; the approximate yield was 512,340 lbs., or 151 lbs. per acre of mature plants. For an account of the processes of tea cultivation, see NILGIRI HILLS. The export of tea from the Madras Presidency in 1876-77 amounted to 144,323 lbs., valued at £16,466; and in 1883-84, 264,777 lbs., valued at £25,775.

Tobacco Cultivation.—Although only 78,707 acres are returned as under the crop in 1882-83, tobacco cultivation, to a greater or less extent, is carried on in every District of the Madras Presidency excepting the Nílgiri Hills. The region where it is most largely practised is Kistna District. On the alluvial lands of the Godávari delta is grown the well-known 'Lanka' (a river island) tobacco. Tobacco is also largely cultivated in parts of Vizagapatam, Nellore, Cuddapah, Bellary, Karnúl, South Arcot, Tinnevelli, Salem, Madura,

and Coimbatore; and from the two last-named Districts the Trichinopoli cheroot manufacturers draw their supplies of raw material.

Tobacco is grown on almost every description of soil from black loam to sand, and from irrigated land to high arid sites. Alluvial lands are preferred; then high ground, and deserted village sites or back-yards of houses. The last are considered the best, on account of the salts impregnating the soil, and for convenience of position as regards manuring, and watching, and curing the produce. The best of the Godávari produce is grown on the alluvial lands which receive rich deposits of silt in the river floods and are out of the influence of the sea-freshes.

Dindigal tobacco is produced on carefully cultivated red loam, to which an alluvial character has been artificially imparted. Some of the highest-priced tobacco is grown on rich dry land under irrigation, but the leaf, while suited for mastication, is too coarse in texture and too pungent in flavour for smoking. In some parts irrigation is practised, and in others it is dispensed with. Only a small quantity of water is supplied to the plant, and, as a rule, not by gravitation, but by mechanical means, preferably from wells of brackish water containing potassic salts. Excess of damp is prejudicial, and the seed-beds and soil generally are superficially drained or stand high. The crop while young is gently watered by hand, and heavy rains detract from the good quality of the leaf, the tobacco grown on ordinary irrigated lands being generally inferior. The manures used are the droppings of sheep and goats penned on the land previously to cultivation, cattle-dung, ashes, and sweepings. In Nellore, salt earth is used. The manures are plentifully applied to all soils except alluvial lands. The seed is invariably sown in prepared beds.

The seasons for cultivation vary according to local climatic considerations. As a rule, sowing commences after the local rains, from July to October, though tobacco is sometimes grown as a second crop, commencing in January. The site for tobacco cultivation is thoroughly manured and ploughed. The seed germinates in about eight days after sowing; and the seedlings are transplanted in the course of about six weeks, on attaining a height of 5 or 6 inches, into holes from a foot to a yard apart, sometimes in ridges, sometimes on the flat surface of the field. In many localities, the seed-beds and the young plants are protected from the extreme heat of the sun by means of mats and other coverings. All leaves except ten or twelve are nipped off to strengthen those left; the flowers are also promptly nipped off with the exception of those purposely left for seed. The leaves begin to ripen in the course of about two months from transplantation, and as soon as one or two turn colour, the crop is collected. This collection is generally effected by cutting the stem with a knife, although in Ganjám and the alluvial lands of

Vizagapatam the leaves are removed separately. In parts of Tanjore, some of the leaves are first plucked in January, and the stem with its remaining leaves cut down in May or June. As a rule, no second crop of leaves is gathered, and where the after-sprouts are collected at all, they are of very inferior quality.

The process of tobacco-drying and fermenting is effected by methods slightly differing in detail. In Nellore, for instance, the cut leaves are hung in the sun for two days, put in heaps, turned every two days, and ranged in layers for twenty days, during which time they are frequently turned. They are next tied in bundles, dipped in water, sweetened with date jaggery or molasses, and are then ready for sale. In other localities, as in Salem District, the plants are left a day or two in the field, afterwards exposed to the sun and dew alternately for a week, then wrapped in straw and buried in the ground for a period of seven days. Afterwards the leaves are stripped from the stems, made into bundles, placed in straw, and put under heavy weights with their ends exposed for six weeks. The piles in which they are laid are opened and turned every second day. In other localities, the leaves after drying in the fields for a day or two are hung over poles or ropes, preferably in the shade, or in regular drying sheds, or in the cultivator's house. They are then stacked in heaps, which are opened out and pressed together again at intervals, until the requisite curing is effected. Occasionally, the leaves are sprinkled with unrefined sugar-water or an infusion of the Cassia auriculata. In Coimbatore the festoons of leaves are hung up on the milk-hedge (Euphorbia Tirucalli) to acquire a characteristic flavour.

The export of unmanufactured tobacco in 1883-84 was 8,442,806 lbs., valued at £134,973, and of manufactured tobacco, 586,633 lbs., valued at £28,967.

Cinchona.—The cinchona plant was introduced on the Nílgiri Hills in 1860 by Mr. Clements Markham, who had been officially deputed to visit South America for that purpose. The novel experiment has proved not only successful, but remunerative. The reports up to 1877 returned seven Government plantations, covering an aggregate area estimated at 1200 acres. The plants are almost equally divided between C. condaminea and C. succirubra. The number of plants in 1882-83 was 967,795. The first yield of the plantations was in 1872, when the earliest trees were twelve years old. The out-turn was 7294 lbs. of dry bark, which sold for £729. In 1876, a consignment was sent to England of 63,000 lbs., which realized £10,597. The plantations also furnished the Government quinologist with 362,050 lbs. of green bark, or 111,481 lbs. of dry bark, valued at £9550. In 1882-83, the total crop for the four estates of Naduvatam, Hooker, Wood, and Dodabetta was 135,016 lbs. of dry bark. Of this amount 62,518 lbs. were shipped to the home market; 69,327 lbs. were sold locally at an average rate of

3s. 1½d. per lb.; and the remainder was held as samples or in store. There are also several private cinchona estates on the Nílgiri Hills, which are cultivated at a profit. For a description of cinchona cultivation, see NILGIRI HILLS.

Government Farm.—In 1865, a Government farm was established at Saidápet (Sydapet), in the immediate neighbourhood of Madras city. It covers an area of 300 acres within a ring fence, and has been the scene of many important experiments. Attention has been especially paid to subsoil draining, the use of agricultural machines, the utilization of manure, and the introduction of new crops, such as Carolina rice and New Orleans cotton. It has also been proved that by deeper ploughing, green crops for fodder can be raised at all seasons of the year. A school of agriculture was established in 1876, and similar training schools have been proposed for other Districts. In 1876-77, the total expenses of the Saidápet farm amounted to £4982; the receipts were £510, the balance being defrayed out of the surplus Pound Funds. In 1882, the contracted operations of the farm, as a practical school of husbandry, were placed under the revived Agricultural Department. Total cost in 1882-83, £7744. The school of agriculture in connection with the farm had 69 pupils in 1882. The Swedish plough, introduced under the auspices of the farm authorities, has been tried, but with qualified success, in 183 *táluks* of the Presidency. On the other hand, the Bihiyá sugar-cane mill is likely to be largely adopted. The operations at Saidápet are now limited to giving a practical course of training in agriculture.

Wages and Prices.—The agricultural hired-labourers of Madras belong to castes that were predial serfs up to the close of the last century. Most of them are still paid in grain, the rate varying in some places from one to two 'measures' (say 3 to 7 lbs.) a day. The lower rate is given to permanent, the higher to occasional, labourers. This distinction is of general significance. The permanent day-labourers enjoy little liberty, as they have usually received an advance of money from their masters on entering service, which is never cleared off. On the other hand, the occasional labourers, while more independent, lead a most precarious existence. During the harvest seasons they can get regular employment, but at other times they wander about seeking work on the roads and other public works. According to an official return in 1875, the wages of agricultural labourers paid in money varied from Rs. 2. 8 (5s.) a month in Salem, and Rs. 3 (6s.) in Ganjám, to Rs. 7. 8 (15s.) in Kistna, Cuddapah, and Malabar. The wages of a skilled workman, such as a mason or carpenter, ranged from Rs. 7. 8 (15s.) a month in Ganjám, and Rs. 9. 12 (19s. 6d.) in Vizagapatam, to Rs. 20 (£2) in Cuddapah, Madura, and South Kánara, and Rs. 25 (£2, 10s.) in the Nílgiris. In 1882-83, the agricultural wage in Salem

was 7s. as against 5s. in 1875; on the other hand, in Kistna the monthly wage was something over 13s. as against 15s. in 1875. In the newly constituted District of Anantápur, the monthly wage for an agricultural labourer was in 1882–83 18s. 9d. In the Nílgiris the rate per month in 1882–83 was 15s. The average agricultural wage throughout the Presidency was, in 1882–83, 4½d. per day, or nearly 10s. 6d. a month. Regarding skilled labour, the average wage of an artisan throughout the Presidency was, in 1882–83, returned at 10½d. a day, or £1, 6s. 6¾d. a month. In Ganjám, in 1882–83, the monthly wages of a skilled workman were 19s. 10½d.; in Vizagapatam, 19s. 10½d.; in Cuddapah, £1, 17s. 3½d.; in Madura, £2; in South Kánara, £1, 10s.; and in the Nílgiris, £2, 5s.

The condition of permanent field hands is thus described:—'They are invariably paid their wages in grain, never in money. The rates vary in different Districts, but inquiry has shown that the quantity of cleaned cereal grain is not usually less than from 4 to 5 lbs. per diem, and often more. The labourer often enjoys the privilege of cultivating vegetables, chillies, and a few oil-seeds or nuts on his own account; and as he gets, besides a subsistence allowance of grain, a percentage on the yield of the harvest, his prosperity depends greatly on the abundance of the crops. Usually the permanent labourers get small money advances from their masters, and occasional presents of cloth, or a rupee now and again on festival occasions; but whatever money may be advanced by the masters, the labourer is seldom able to repay, and, as a rule, is tied to his servitude for life.'

Food prices have not risen of late years. In 1875–76, the following were the average quantities of the several kinds of food-grain to be obtained for the rupee (2s.):—Common rice, 32 lbs.; paddy or unhusked rice, 57 lbs.; *cholam* (the staple food of the people) and *kambu*, 53 lbs.; *ragí*, 56 lbs.; *varagu*, 79 lbs.; wheat, 23 lbs. In the famine year of 1876–77, the average price of common rice throughout the Presidency rose to 17 lbs. for the rupee. In Bellary, at the end of 1876, only 15 lbs. of *cholam* could be obtained for the rupee, showing a rise in price of more than threefold. In 1882–83, prices current for a rupee (2s.) were as follows:—Common rice, 32 lbs.; paddy or unhusked rice, 58 lbs.; *cholam* and *kambu*, 63 lbs.; *ragí*, 65 lbs.; *varagu*, 84 lbs.; wheat, 22 lbs.; salt cost the people 2s. for 29 lbs., or a little less than 1d. a pound.

The live stock of the Presidency in 1882–83 was returned at 3,687,782 bullocks, 3,453,129 cows, 1,483,938 buffaloes, 7941 horses, 30,189 ponies, 124,731 donkeys, 5,635,867 sheep, 3,305,946 goats, 254,557 pigs, 481 elephants, 50 camels, and 117 mules. There were also 11,585 boats, 313,578 carts, and 2,013,011 ploughs. Plough bullocks cost about £2, 10s., and sheep about 5s. each.

The Famine of 1876–78.—The great famine which recently devastated all Southern India can only be slightly touched upon in this place. Like most widespread famines, it was caused by drought, but not by the drought of a single season or of a single year. The harvests of 1875 had been indifferent, especially in the Ceded Districts. In 1876, the south-west monsoon or summer rains, on which the northern Districts are largely dependent, proved very deficient; and the north-east monsoon or autumn rains, on which the southern and eastern Districts almost entirely rely for their cultivation, failed still more completely. Except in the deltas of the Godávari and Kistna, the total rainfall of 1876 scarcely anywhere exceeded 10 inches, as compared with an average of about 30 inches. When the monsoon failed in October 1876, it was recognised that a twelve-months' famine was at hand, and inevitable. In 1877, the south-west monsoon withheld its showers for a second time, and distress gradually intensified through the year. At last, the north-east monsoon broke with a full downpour in November 1877, and the crops of the coming season were assured. The area in Madras seriously affected by famine was estimated by the Famine Commissioners at 83,800 square miles, with a population of 19,400,000 persons. No District entirely escaped between the Kistna river and Cape Comorin; but the distress was severest in the tract immediately south of the Tungabhadra, including the Districts of Bellary, Anantápur, Karnúl (Kurnool), Cuddapah, and Nellore, and farther south in North Arcot and Salem. Mysore suffered exceptionally. As time went on, it was found that no adequate stores of food remained in the country; and but for the efforts of Government, and the vast imports of food brought into the country by the European mercantile houses from Bengal, Burma, and the Further East, a much greater proportion of the population than actually perished would have been swept away.

The Commission of Inquiry on Indian Famines, appointed in May 1878, thus describes the famine, and the manner in which it was dealt with by the Government. The first peculiarity in the management of the Madras famine was that following the example of Behar in 1873, the local Government at an early period thought it necessary to provide against a possible deficient activity of private trade or the failure of the supply of food in the less accessible Districts, by purchasing 30,000 tons of rice, to be stored in places where the demand for relief was expected to be large. At the same time, they proposed to put in hand several large works of permanent utility. The Government of India disapproved of both these steps, and decided, that at this stage of the distress, minor local works which would not take the people far from their homes should be organized. The purchased grain was partly used for purposes of relief, and the remainder was sold.

Works were opened under the Public Works Department for the employment of the famine-stricken at an early period, and others were afterwards started in 1877, but the greater part of the applicants were received on works under the supervision of the civil officers of the District. The scale of wage was fixed, in accordance with, but somewhat below, the rates which had been adopted in Behar. The numbers on relief soon became very large, and by January 1877 had risen to over a million. In that month, when Sir R. Temple visited the famine Districts, he was of opinion that relief was given on too liberal a scale and to persons who did not stand in absolute need of it. He advised the Government of Madras to reduce the rate of wages, and they adopted the scale which was being introduced into Bombay, the amount of money wage being made to vary with the price of food-grain. After these changes, and on the introduction of stricter discipline, the numbers on works were at first considerably reduced; but they began to rise again shortly, those on gratuitous relief rising at a still higher rate, so that the total exceeded a million in May, and reached the maximum figure of 2,218,000 in September 1877.

The effect of the reduced wage was a subject of considerable difference of opinion; it was opposed by many of the officials, including the Sanitary Commissioner, as providing less than was necessary for the labourer. After the orders for its adoption had been in force about three months, the balance of opinion being unfavourable, it was abandoned, and a higher rate substituted at the end of May. At the same time, it was decided that all weakly persons, and all who were incapable of performing 50 per cent. of a full task for a man in normal condition, should be removed from the relief works and supported at their homes; and a system of house-to-house relief was introduced under which a dole of money was given, sufficient for the support of the applicant. The test of fitness was the certificate of the head village official, submitted to the village inspector, whose proceedings again were under the control of the relief officer of the *táluk*, so that opportunities for abuse might be minimized. In the end of August, when it became apparent that relief operations would have to be continued at least to the end of the year on a very large scale, the Viceroy visited Madras, and after consultation with the Governor of the Presidency, certain changes were resolved upon, while the main principles on which relief was to be administered were repeated with additional emphasis.

It was authoritatively announced that 'a large scheme of useful public works under departmental supervision should be the backbone of the relief system;' and a great expansion of such works was ordered, combined with the restriction of gratuitous relief in their villages to 'those who are both incapable of work, and without other adequate

means of support.' The direction of all matters connected with the famine, which had hitherto passed through the channel of the Board of Revenue and the Council, was taken by the Governor under his sole charge. He issued his orders directly to District officers; and a large additional staff of officers was introduced from Northern India to strengthen the supervising agency. These arrangements were complete when, as in Mysore, the long-expected rain began to fall abundantly. The hearts of the people revived, and they dispersed so rapidly that the numbers, which in September had reached 2,218,000, had fallen in December to 440,000, and in March 1878 to 215,000. A considerable number of debilitated persons remained, however, on the hands of Government till the harvest of 1878 was ripe, in October or November.

The abnormal mortality of the two famine years has been estimated at two millions. There was also a decrease of 800,000 in the births of the two years 1877 and 1878; nor did this decrease in the birth-rate cease in the latter year. The average number of persons relieved was 787,000 daily for the space of twenty-two months; and the total cost of the famine is estimated at eight millions sterling. The land revenue remitted was about 118 *lákhs* (£1,180,000), and the outlay on relief about 675 *lákhs* (£6,750,000).

Viewed by the light of the Census Report for 1881, it is clear that the loss in the population of the Presidency since 1871 has been wholly due to the influence of famine. In the Districts not affected by the famine, the population had increased between 1871 and 1881 by over 7 per cent., or within ·16 per cent. of the normal rate of increase. In the Districts affected by the famine (Nellore, Cuddapah, Karnúl, Bellary, Anantápur, North Arcot, Madura, Salem, and Coimbatore), the actual loss is shown to have been nearly 13 per cent. on the figures of the Census of 1871. Throughout the famine Districts, the population in 1881 was nearly 18 per cent. below what, at the normal rate of increase, it would have reached in that year.

The famine fell most heavily on the general Hindu population, which decreased 13·64 per cent. in the afflicted Districts. The Muhammadan population in the famine Districts was much less severely affected. This was due to the fact that the Muhammadans are not largely agricultural, but congregate in large towns which were early centres of relief. The returns show that whereas only 8·64 per cent. of the Hindu population occupies the large towns, the Muhammadans make up 21·4 per cent. of their urban population.

During the eighteen months ending January 1878, the total amount of grain imported into Madras by sea was nearly 700,000 tons. The real problem was to bring these stores of food to the starving people. This task was effected by means of the railways, and especially the Madras Railway. This line touches the sea at Madras city and at

Beypur; while at Ráichor it joins the Great Indian Peninsula system, thus affording through communication with the rest of India. The South Indian Railway runs northward from Tuticorin. The total amount of grain distributed in the interior by these several lines between August 1876 and November 1877 was 724,339 tons, yielding a freight of £553,695.

It will never be possible to obtain perfectly complete statistics of the loss of life caused directly and indirectly by this stupendous calamity. As always happens in such cases, starvation suddenly came with a rush. No administrative capacity and no philanthropic zeal could cope with a distress so intense, and extending over so wide an area. Government relief works on a colossal scale, gratuitous distributions of food at the public expense, and the searching benevolence of private charity, were all tried; and all proved inadequate. Actual starvation slew hundreds of thousands, and the diseases that stalked in its train claimed yet more victims. A not unreasonable conjecture, founded on a partial Census, has placed the mortality in the most distressed Districts, such as Bellary and North Arcot, at about one-fourth of the total population. A Census of the entire surviving population of the District of Salem strengthens this inference. Dr. Cornish, the Sanitary Commissioner of Madras, estimates the total loss throughout the Presidency at over three millions, including deaths from various diseases and persons 'missing.' In the Report of the Famine Commissioners, the actual loss was stated at two millions.

The following statistics give a general idea of the character of the calamity, and the means adopted to alleviate it:—In Bellary District, one-third of the inhabitants were in receipt of relief, and one-half of the land fell temporarily out of cultivation. In one terrible week of September 1877, a total of 2,218,000 persons received Government relief, of whom 708,255 were employed on works, and the rest relieved gratuitously. The mortality in Madras city during the year 1877 was at the rate of 116·7 per thousand. At one relief camp in Salem District, during May 1877, 746 persons died out of a strength of 7000. The expenditure throughout India on account of famine during the two years ending March 1878 (including loss of revenue), is officially estimated at nearly 10 millions sterling, of which by far the largest portion is debited against Madras. The amount subscribed by private charity, chiefly at the London Mansion-House, reached a total of £820,000. This large sum was distributed through the agency of local committees, principally in providing seed grain, plough cattle, and other permanent necessaries of living, and in supporting those who for various reasons lay beyond the reach of Government relief.

Irrigation.—With the exception of the Western Jumna Canal in the

Punjab, the oldest of the irrigation works undertaken by the British Government in India are those of the Madras Presidency. Among the very earliest was the Godávari anicut or weir, commenced in 1844, for the supply of the canals of the delta at the head of which it stands. The irrigation works in Madras were classified until 1883 under three headings, the classification being determined, not by their hydrographic character, but from the administrative point of view. The first two classes of works, known in the systems of account as Ordinary and Extraordinary, were constructed and kept in repair at the sole charges of Government, and were under the Department of Public Works; the third class belonged to the Madras Irrigation and Canal Company, until in 1882 the projects initiated by the Company were taken over by Government. The Ordinary Works may be described as those for which no capital and revenue accounts were kept; that is to say, they consisted of undertakings, individually small, but very large in the aggregate, which did not form part of any comprehensive system, supplying officially collated returns of profit and loss. According to the official classification, maintained until 1882-83, they ranked as 'unproductive,' and were constructed out of revenue. They were sub-divided into (1) rain-fed tanks or reservoirs, and (2) channels led off from rivers by means of anicuts or weirs. For such tanks, the rainfall is caught and retained before it reaches natural drainage lines; for the channels, it is diverted from the drainage lines by artificial means. The following figures will show the general importance of these Ordinary Irrigation Works:—There were, in 1882–83, altogether in the several Districts of the Presidency 33,318 tanks and canals under Government supervision, besides 1212 weirs across rivers or streams; the total area irrigated was 3,365,000 acres, yielding a revenue of £1,310,000. In the year 1876–77, the sum expended on original works of this class, and on repairs, was £135,232. The total Ordinary expenditure of the Irrigation Department (out of current revenue and exclusive of borrowed capital) was £255,600 in 1876–77, and £219,955 in 1882–83. Of this latter sum, £23,643 was disbursed for original works, £92,423 for repairs of existing works, £39,072 for establishment charges, £1593 for implements, £56,799 for new agricultural works and repairs of old ones, and £6425 on small miscellaneous protective works.

Concerning the so-called Extraordinary Works, it is possible to speak with more precision. These consisted of large projects, constructed out of borrowed capital; and they were defined as being such as give a reasonable promise that they will yield a return at least equal to the interest of the capital expended. The following is a list of the seven most important works up to 1883 comprehended under this class:—(1) Godávari Delta, (2) Kistna Delta, (3) Penner Anicut,

(4) Cauvery (Káveri) Delta, (5) Srívaikuntham Anicut, (6) Sangam Anicut, and (7) Karnúl Canal. The total area irrigated by these seven productive public works in 1882–83 was 1,757,579 acres. Up to the close of 1882–83, the total amount of capital expended on these seven works was £3,990,552 ; the gross revenue in that year was £360,063 (including share of enhanced land revenue) ; and the working expenses (including charges for collection) was £107,197, leaving a net revenue or profit of £252,866, equal to 6·34 per cent. on the total capital outlay to the end of the year. But if the outlay on the Sangam Anicut works (which had not commenced to earn in 1882–83) and the year's expenses for the Karnúl Canal be excluded, the net returns would be 12 per cent. on the capital outlay in 1882–83.

In addition to these seven important 'productive' public works, there are three minor systems classed under the same designation, namely — (1) The Chembrambakam Tank, (2) the Palar Anicut, and (3) the Pelandorai Anicut. Upon them there had been expended up to 1882–83 a sum of £280,458 ; and for the last few years no practical surplus has been obtained.

According to the method officially adopted in keeping the profit and loss account, the average return on capital in 1882–83 for all extraordinary works was 10 per cent., ranging from 51 per cent. in the case of the Káveri Delta to 1 per cent. for the Palar Anicut. Out of the total revenue in 1882–83, £10,250 was derived from tolls on navigation, of which £6295 was paid on the Godávari, and £3955 on the Kistna works.

The foregoing figures refer to the old classification of the Madras Presidency irrigation systems into Ordinary and Extraordinary Public Works. This classification was observed until 1882–83, when a revised classification was introduced, in accordance with which the irrigation systems of the Presidency are now divided into (1) Productive Public Works, (2) Irrigation and Navigation Works not classed as Productive, and (3) Irrigation and Navigation Works for which neither Revenue nor Capital Accounts are kept. The first two classes of the later classification correspond to the Extraordinary Works of the older classification ; while the last class of the later classification corresponds somewhat, but in a much modified sense, to the Ordinary Works of the older classification.

Under Class I., the Productive Public Works of Madras, are now (1883–84) grouped the Godávari Delta system, the Kistna Delta system, the Penner Anicut, the Sangam Anicut, the Karnúl Canal, the Barur Tank, the Káveri Delta system, and the Srívaikuntham Anicut. On these works, the total outlay up to the end of 1883–84 was £4,171,526 ; they effectively irrigated in the same year 1,814,844 acres, of which 154,973 acres were twice cropped. The revenue derived

from them was £560,784, or at the rate of 6s. an acre, for the first crop; and £41,135, or at the rate of 5s. 3d. per acre, for the second crop. Excluding the Karnúl Canal, now admitted to be a financial failure, the Productive Works paid in 1883-84 a profit of 8·62 per cent.

Class II. of the Madras Irrigation Works embraces the Chembrambakam Tank system, the Palar Anicut, the Pelandorai Anicut, the Madras Water-supply and Irrigation Extension project, and the Buckingham Canal. On these systems, the total outlay up to the end of 1883-84 was £1,006,088; they effectively irrigated 91,569 acres, of which 32,682 acres were twice cropped, besides supplying fresh water to the city of Madras, and offering large facilities for navigation. The total loss on Class II. systems was £1687 in 1883-84.

Class III. of Irrigation Works includes many miscellaneous works, consisting for the most part of tanks and channels. In 1883-84, the expenditure on the 174 tanks and 33 channels completed during the year, as well as on 82 tanks and 22 channels in process of completion, was £12,253; on the repair of 598 tanks and 254 channels £55,179 was spent during the same year; while £31,905 was expended on minor irrigation works. In addition to these sums, £17,860 was expended in 1883-84 upon famine protection works. The area effectively irrigated under works of Class III., was in 1883-84, 2,525,794 acres, of which 675,416 acres were twice cropped.

Regarding irrigation from Government Works in the Madras Presidency as a whole during 1883-84, the figures are—area irrigated, 4,566,016 acres; amount expended, £524,071 (of which £33,324 was the provincial contribution, and £16,293 was paid away in England); amount of irrigation revenue, £1,526,171; increased land revenue due to irrigation, £569,108; total land and irrigation revenue, £2,095,279.

The Madras Irrigation and Canal Company was incorporated in the year 1858; and in 1863, a contract was entered into with the Indian Government for the construction of a specified piece of work at a cost of 1 million sterling, on which sum Government guaranteed interest at the rate of 5 per cent. The selected work was that known as the Tungabhadra project, which comprised the construction of a canal both for irrigation and navigation from Sunkesala, 17 miles above the town of Karnúl (Kurnool) on the Tungabhadra, to the Kistnapatam estuary on the sea-coast in Nellore. The Company undertook the section of this enterprise which extends from Sunkesala to Sumaiswaram on the Penner river. By 1866, all their original capital was expended, and an additional loan of £600,000 was obtained from Government.

The work was virtually completed in 1871, and from a financial point of view it has hitherto proved a failure. The canal is now

known as the Karnúl-Cuddapah (Kadapa) Canal. It was taken over by Government from the Madras Irrigation and Canal Company in 1882. The canal is carried across the Hindri river by an aqueduct along 14 arches, each with a span of 40 feet. After a course of about 70 miles in an easterly direction, the canal turns south following the course of the Kundu river; then traversing the Nandiál and Sirvail *táluks* of Karnúl District, it enters the Proddatur *táluk* of Cuddapah. It is taken across the Penner at Adniamaipalli by means of an anicut which holds up the water at the proper level, and it terminates, after a course of 191 miles, at the Krishnapuram station of the Madras Railway, four miles from Cuddapah.

While the Karnúl-Cuddapah Canal was the property of the Company, the revenue from irrigation averaged considerably less than a *lákh* of rupees (£10,000) annually, while the charges for repairs and establishment yearly exceeded a *lákh* and a half (£15,000). In addition, interest at 5 per cent. on a capital of £1,600,000 had to be provided; the yearly deficit being, in accordance with the agreement between Government and the Company, made good out of the State revenues. It is, however, anticipated that the annual loss to Government will be reduced now that the canal has become State property; but it is not expected to yield a profit. The purchase money paid for the canal by Government to end of 1883-84 was £1,763,171. The famine of 1876-78 called attention to the undeveloped capacity of the undertaking; and in those years from 50,000 to 90,000 acres were irrigated by the canal. Previous to the famine years the canal watered only from 13,000 to 19,000 acres; in 1883-84 the area was 19,674 acres. The cultivators have recently shown more disposition to use the water placed at their disposal, and a serious effort is now being made to stimulate navigation. Until 1881-82 no attempt was made to utilise the canal for navigation. The receipts from navigation in 1883-84 were £459. The irrigation charge for water averages a little more than 6s. per acre.

Land Tenures.—The greater part of the soil of Madras Presidency is held by the cultivators direct from Government, under the tenure known as *ráyatwárí*. In 1882 there were over two and a half million persons holding as tenants under this system. The exact number of *pattas* or holdings under *ráyatwárí* tenure in that year was 2,543,036; and, exclusive of South Kánara, for which no returns are available, the aggregate area of the holdings amounted to nearly 19 million (18,772,370) acres, or about the same as that occupied by the landlords' or *zamíndárí* estates.

A proper understanding of the land system now prevailing in Madras cannot be obtained without a short sketch of the history of the *ráyatwárí* tenure. As has been already stated in the historical section, the

wide area of territory now subjected to one Government possessed in ancient days no uniformity of administration. When the Nizám of the Deccan, and his nominal subordinate, the Nawáb of the Karnátik, ceded to the British the large tracts which still constitute the bulk of the Madras Presidency, the revenue collection with most other branches of administration was found to be in a state of anarchy. In the north, the hill chiefs exercised a wide but uncertain authority over the lowlands; in the south, their place was taken by the *pálegárs*, who fought bravely for fiscal independence. Along the Malabar coast, the dominant caste of Nairs claimed the position of feudal landlords, which they have not unsuccessfully maintained to this day. In the neighbourhood of Madras city, the indigenous village communities appear to have preserved their corporate privileges with tenacity; but throughout the greater part of the country, no rights intervened between the actual cultivator of the soil and the British Government.

Under these circumstances, it became necessary to provide a definite system which should guarantee the regular collection of the land revenue. At first, in imitation of the precedent supplied by the Permanent Settlement of Bengal by Lord Cornwallis in 1793, it was proposed to establish a class of landholders throughout Madras, with absolute rights over the land, subject only to the payment of a rent-charge fixed in perpetuity. This system never found favour with the local Government, but it was enforced in 1802 under positive orders from England. The land already in possession of *zamíndárs* was confirmed to them for ever; and where no *zamíndárs* could be found, the country was artificially parcelled out into estates of convenient size called *muttas*, and settled in perpetuity with any one who came forward to bid for them. These operations were confined to the territory that had been longest under the rule of the Company, comprising the Northern Circars, the tract round Madras known as the Jágír, and the Barámahál in the present District of Salem. In the meantime, the area of British territory had been growing rapidly, and the fundamental principles of land settlement were allowed to come up a second time for consideration.

The *zamíndárí* system, with a permanent assessment, had not proved successful in Madras; and the artificial landlords, who had accepted too high rates, threw up their farms one after another. On the other hand, the *ráyatwárí* tenure found a strenuous advocate in the person of Colonel (afterward Sir Thomas) Munro, whose influence is still to be traced in almost every District of Madras. The alternative proposal of collecting the revenue through the agency of the village communities was also considered, but met with little support, though tried for a short time in the extreme south. Finally, in 1820, after much hot discussion, the Court of Directors resolved to adopt

what was then called 'the improved *ráyatwárí* system;' and Sir Thomas Munro was appointed Governor of Madras in that year to carry out his own favourite scheme.

The earliest *ráyatwárí* settlement of which we have any knowledge in the Madras Presidency, and which still survives in full operation, is that of the District of South Kánara, framed in the 14th century, and revised in the 16th by the Bednúr government. It was based on an estimate or valuation of the annual out-turn of the rice land and plantations then under cultivation within the properties, great or small, held by the agricultural population of the District. Each owner—and in the case of escheats to the State (*sarkár-gweni*), each tenant—was brought into account (*warg*) with the revenue officers in respect to the fixed land-tax (*kist*) assessed on his cultivation each year. The settlement survived, with many vicissitudes and arbitrary additions to the demand (*shámilát*), in remarkable completeness, all things considered, until the British rule supervened in 1799. This ancient *ráyatwárí* settlement was accepted and affirmed by the first settlement officer in South Kánara District, Major (afterwards Sir Thomas) Munro. It is this form of *ráyatwárí* settlement for which he successfully contended, in preference to the proposed parcelling out of the District amongst farmers of revenue, who could not even look to waste or forest for the improvement of their income, both being included in the immemorial possessions of the ancient proprietary. When the chief holder was, as in many cases, raised to the proprietorship by special grant, a separate title-deed (*mulpatta*) was conferred on the occupant.

The next *ráyatwárí* settlement in historical order, likewise of native origin, was that made with the tenantry of the hereditary proprietary (*jenmi*) of Malabar by Arshed Beg, Tipú Sultán's revenue officer, in 1784 and subsequent years. For all practical purposes, Malabar had been a free and unconquered country until Tipú's Muhammadan invasion. Its Hindu feudal princes and great proprietors (*jenmi*) lived on the rents (*jenmi-patan*) of their estates, and such royalties as were levied were in the main unconnected with the soil; the land remained unassessed to any land-tax or State dues. During the confusion consequent on the Muhammadan invasion, the great bulk of the Hindu proprietary fled to Travancore, or otherwise eluded the settlement officers of the conqueror; and a *zamíndárí* settlement with the great hereditary proprietary (*jenmi*) became impossible. A *ráyatwárí* settlement was therefore made by Tipú's revenue officers, in the main with their tenantry (*kanomkárs*), and with the smaller proprietors who occupied their own land.

Broadly speaking, the rent (*jenmi-patan*) payable by the tenant for his holding was ascertained, and three-fifths of the amount were claimed as revenue due in future to the State, two-fifths being left to discharge

the reduced demand of the landlord. Changes and modifications have since taken place; but this *ráyatwárí* settlement (on the estimated rent-roll) is still the basis of the revenue administration of Malabar. The bulk of the demand, especially on the properties of great Rájás and Namburi estates, is now discharged by tenantry under the varied tenures of the country. The *ráyatwárí* settlement here altered no old tenures, and created no new rights; it gave no permanency to leases or occupation, and did not protect against a rise of rent at the will of the proprietor. Indeed, as a rule, the *ráyatwárí* settlement has been carried out in Districts where the ancient Hindu village system retained its vitality. Over the greater part of the country it was a transition from the national village joint-settlement—which subsisted in parts of the Northern Circars till 1860—to an individual settlement with each cultivating member of the community.

The ancient Hindu village system still underlies every form of British land administration in South India. The *zamíndár* always treated his village communities as the units of rent and of revenue responsibilities, and almost invariably does so still. Where no such superior lord existed, or now exists, the village has always been, and is still, the unit of land revenue administration, and of rural social status. It was so under the now obsolete village joint-rent settlement, which was the natural and prevailing form of revenue arrangement under the rulers who preceded the English, and indeed during the early years of our own rule. The abortive *muttadárí* settlement consisted in parcelling out the undivided villages of the country into convenient farms for the collection of the revenue. The village is still the unit of administration under the more recent and Europeanized *ráyatwárí*, or individual settlement with the sharers in village lands.

The difference lies in that, under the ancient system, the village community as a body was responsible for the apportionment of the lump demand amongst their cultivating members and sharers in the village lands; under the *ráyatwárí* settlement, the head of the village and village accountant keep accounts with each tenure-holder or cultivator within the limits of the village, for the demand assessed on his individual holding, whether that demand be (as is still the case in Districts not yet subjected to Survey-settlement operations) the old prescriptive demand, or the newly determined claim under the Survey-settlement for thirty years. The *ráyatwárí* system of settlement has imparted more permanence to tenures. A separate fixed possession of land was inconsistent with the village joint-settlement. The demand to be paid by each sharer in the village lands is now fixed. But on the other hand, this form of settlement, when extended to communities fully subject to the Hindu village organization, has traversed the spirit of that institution, and weakened, if not entirely relaxed, those

ties of common interest and of mutual support and liability which were the bonds of Indian rural life.

In the Madras Presidency,—subject to the punctual discharge of the assessed rent-charge or demand on his holding, and sale of the land by public auction, free of all encumbrances, in case of legal default,—the control of a village landholder under a *ráyatwárí* settlement over his property is complete and indefeasible as respects the exercise of all proprietary right, such as sale, gift, inheritance, alienation, partition, voluntary relinquishment (including the responsibility for the revenue), and the like. He can only be ousted by Government by sale for default, or under the Land Appropriation Laws. The main difference between the condition of landholders under a *zamíndárí* and a *ráyatwárí* settlement lies in the pledge held by the former against an increase in the fixed land revenue. Nor is even this difference consistent with the earliest conceptions of the *ráyatwárí* settlement. The first advocates of this system, as against a *zamíndárí* or *muttadárí* settlement, did not seek to deprive the smaller landholders and peasant proprietary in Government villages of that fixity of demand, which was the guiding object and spirit of the administration at the time. The early *ráyatwárí* settlements of Salem and South Kánara were designed to be permanent in respect to all land under cultivation within assessed occupied holdings. But under the uncertainty caused by the discussion of the relative merits of the two systems, written engagements (*sanads* and *kábuliyáts*) were not exchanged at the time; and before the *ráyatwárí* system was sanctioned for general adoption, the disadvantages of the permanent *zamíndárí* settlement were becoming apparent, and the privilege of a permanent *ráyatwárí* settlement was withheld.

A settlement of the land revenue of a great Presidency, which practically comprised an individual arrangement with each independent landholder or sharer in the village property, and further required the issue of an annual notice of demand (*patta*) in detail to each revenue-payer, necessarily involved an enormous amount of adjustment of account each year at the hands of the Collector and a multitude of subordinates, down to the village accountant of almost every village. Voluntary relinquishment, fresh occupation, changes of possession, and the like, had to be registered; local circumstances added greatly to these causes of fluctuation. The main items of demand which had to appear on the *patta* had the usual Indian tendency to become prescriptive and unalterable from year to year. They generally did become so; especially in prosperous Districts like Malabar and South Kánara, and in respect to the better class of land, in every District. But the necessity of giving large remissions for a variety of causes and under a vast number of *pattas*, of making and recovering advances for cultivation (*takkáví*), settling deserted farms and the like, gave to the wide-

spread inquisition into these matters and the settlement of the village accounts (*jamábandi*) much of the appearance, and some of the characteristics, of an annual *ráyatwárí* settlement. The *ulungu* adjustment of the demand in Tanjore and Tinnevelli was practically an annual settlement on the corrected prices of the year.

The chronic agricultural depression (caused by low prices and dearth of rural capital, which prevailed throughout the first forty or fifty years of the history of this settlement) greatly enhanced the labour and difficulty of the annual *jamábandi.* Circumstances have entirely changed within the last thirty years. A permanent and considerable growth in the prices of all agricultural produce, increased cultivation of the more valuable products, and other circumstances of advancing prosperity, have enabled the husbandmen to do without remissions. Except in rare years, and under special circumstances, advances are no longer made for cultivation; and the *ulungu* has given place in Tanjore and Tinnevelli to a settled demand per acre. The revised Survey-settlement has removed many obstacles to the punctual realization of the revenue, which has now become easy, punctual, and acceptable to the people. Owing to increased cultivation and other causes, the aggregate yield has also risen. The annual *jamábandi* is a comparatively easy and short operation; and in the absence of change, the issue of annual *pattas* is falling into disuse.

The land revenue in 1883-84, the latest year for which figures are available, amounted to £4,741,399; but the figures of 1881-82 are here made the basis of calculation regarding land revenue pressure, etc. Going back a quarter of a century, the annual returns may be taken for quinquennial periods to show the amount of land revenue received. In 1861-62, the total receipts from land revenue amounted to £4,112,588; in 1866-67 (for 11 months only), to £3,635,509; in 1871-72, to £4,435,341; in 1876-77 (famine year), to £3,296,575; and in 1881-82, to £4,575,404. Where the assessment is still imposed as at the beginning of this century, the rate on irrigated land is occasionally as high as £3, 10s. per acre, and that on unirrigated land as high as 9s. The minimum on both kinds of land sinks to less than a shilling, and the total number of rates in a single District may be as large as 885. In those Districts where the new Survey and Settlement have been introduced, the rates vary from 6d. to £1, 4s. per acre; and the total number of separate rent rates in a District amounts in some cases to 35.

Taking the average of the entire Presidency, the assessment per acre is about 2s. 3d. on unirrigated, and 9s. 6d. on irrigated land. Taking the gross area for an average recent year, and the land revenues for an average recent year in different Provinces of British India, the pressure of the land-tax is thus compared over the Peninsula

with the pressure in the Presidency of Madras. In Madras, 1s. 1$\frac{3}{4}$d. per acre; Bengal and Assam, 7d.; N.-W. Provinces, 1s. 11d.; Bombay, 9$\frac{1}{2}$d.; Punjab, 7$\frac{3}{4}$d.; British Burma, 2d.; Central Provinces, 2$\frac{1}{2}$d. The pressure per head of the total population may be thus compared—Madras, 3s. 1$\frac{1}{2}$d.; Bengal and Assam, 1s. 2$\frac{3}{4}$d.; N.-W. Provinces, 3s. 1$\frac{1}{2}$d.; Bombay, 3s. 10d.; Punjab, 2s. 4$\frac{3}{4}$d.; British Burma, 3s. 3$\frac{1}{4}$d.; Central Provinces, 1s. 6$\frac{3}{4}$d. The incidence of rent in Madras, that is to say, the incidence of all payments to Government, and to other landlords, if any, may be taken as 4s. 4$\frac{3}{4}$d. per cultivated acre, and 4s. 3$\frac{1}{2}$d. per head of population. Taking the figures of population, cultivated area, and land revenue for Madras Presidency for 1881–82, the incidence of the land revenue in that year was 4s. 2$\frac{1}{2}$d. per cultivated acre, and 2s. 10$\frac{4}{5}$d. per head of population.

Survey and Settlement.—The original introduction of the *ráyatwárí* system was based upon no scientific measurement of the land, or classification of the productiveness of the soil, and considerable confusion incident to such deficiencies prevailed throughout the country as respects revenue administration. Added to this, the revenue demand had in almost every District become exceedingly oppressive. In the main, the old prescriptive revenue demand of the Madras Presidency was based on the assumption of a share of the crop—generally as high as one-half in theory—commuted into a money rent-charge at the high prices current in the early years of the century. Prices steadily declined in subsequent years, and, between 1830 and 1845, had fallen so much below the commutation rates that much land was thrown up and remained out of cultivation, and the condition of the agricultural population became depressed and critical. In 1858, a department of Revenue Survey was established, and in the same year a revision of the Settlement was begun.

The Survey, as now organized in the Madras Presidency, is conducted on approved scientific principles. It combines the operations of a cadastral survey with those of a perfect topographical survey on a trigonometrical basis. The standard scale of 16 inches to the mile is, however, confined to cultivated Government villages; hill tracts and *zamíndárí* estates are mapped on scales varying from 4 inches to $\frac{1}{2}$ an inch to the mile. Up to the close of 1875–76, a total area of 40,407 square miles had been finished on the regular scale, and 17,393 square miles on the smaller scale; while 13,420 village maps had been published. The area mapped in 1882–83 on the standard scale was 50,775, and on the lesser scales 45,289 square miles; number of village maps published up to 1879, 17,470.

Settlement operations follow in the wake of the Survey, with the object of removing injustice and fixing the land revenue on a satisfactory footing. These operations are proverbially tedious, but on their

thoroughness depend both the efficiency and justice of Indian local administration. The entire series of circumstances affecting the production of every village come up for consideration. Questions of meteorology, geology, and sometimes chemistry, have to be determined. Agricultural experiments have to be conducted; the local records of plenty and famine have to be searched; and the probabilities of improved means of communication have to be reckoned. Finally, a table is framed showing the yield of each class of soil, and this yield is commuted into money by an average struck on twenty years' market prices, after allowing various abatements. From the value of the gross produce thus determined, the cost of cultivation is deducted, and then the remainder or net produce is divided into two equal moieties, ot which one is taken as the Government demand on the land. At the close of 1882–83, the new Settlement had been introduced into the whole of 10 Districts, and 8 other Districts had been partially settled. The cost from the commencement had been £724,981, at the rate of 4 annas (or 6d.) per acre. The additional revenue now realized is about £120,000, being at the rate of 16 per cent. on the outlay, not including the prospective increase to be derived from waste lands, comprised in the Settlement but not yet taken up for cultivation.

Zamíndárí or Permanently Settled Estates.—Although the *ráyatwárí* system of settlement may be regarded as the characteristic feature of Madras, yet proprietary estates on the Bengal model are by no means rare in parts of the Presidency. These estates conform generally to one of two types. They are either the remains of ancient principalities, which the holder cannot sell or encumber beyond his own life interest, the succession being hereditary in the eldest son; or they are creations of British rule, dating from 1802, and subject to the usual Hindu rule of partition. The chief *zamíndárís* of the first class are those of PARLA KIMEDI in Ganjám, VIZIANAGARAM in Vizagapatam, PITTAPUR in Godávari, VENKATAGIRI in Nellore, RAMNAD and SIVAGANGA in Madura, all of which see separately. On the *zamíndárí* estates, the land-dues, being permanently fixed, may be considered as practically no longer a share of the produce, but as a tax. The Government does not regulate the succession to the *zamíndárís*: although it sometimes interferes to recognise a *prima facie* claimant, upon demise of the owner, or pending a suit. The total area of the *zamíndárí* estates of both classes is estimated at 19 million acres, or nearly one-fifth of the whole Presidency. The estimated revenue of the *zamíndárs* is over £1,500,000. More than three-fourths of the estates pay less than £500 a year; and there are only 8 estates which pay more than £10,000. The *peshkash*, or tribute payable to Government, amounts to £513,000. As this *peshkash* is fixed in perpetuity, no increase of revenue accrues to the State as more land is brought under cultivatoin.

Ináms or Revenue Free Grants.—It was the immemorial practice of native governments, whether Hindu or Muhammadan, to alienate the land revenue either for religious endowments, or in favour of certain classes of privileged persons, or for services rendered to the State and local communities. But while it was not the principle of the Muhammadan rulers to regard alienations of revenue as permanent or binding, their policy with reference to such *inám* tenures was practically lenient. It recognised the ancient grants to Bráhmans, and endowments conferred on temples. The British Government, since 1822, has in the main adopted the alternative policy of granting pensions in money for service rendered; but it has always scrupulously respected ancient land grants. In general the quit-rent on *inám* villages is a fixed revenue, and as a rule no remissions are granted. The following is a classification of the *ináms* or revenue-free tenures found in the Madras Presidency:—

(1) Lands held by religious institutions, with an estimated area of 1,458,081 acres, on which the Government assessment would ordinarily be £242,247; the larger portion of these are held by the pagodas at Tripati, Conjevaram, Srírangam, Rámeswaram, and Madura: (2) grants for purposes of public utility, chiefly for providing water and shade:—total area, 156,949 acres, with a hypothetical assessment of £30,791: (3) lands held for the maintenance of irrigation works, with an area of 24,824 acres; hypothetical assessment, £14,071; these are chiefly to be found in the North, where they are known as *dasabhandams:* (4) grants of subsistence to Bráhmans and other religious personages; these form nearly one-half of the whole, with an area of 3,694,394 acres; hypothetical assessment, £548,993: (5) grants of maintenance to the families and officials of dispossessed *pálegárs* or local chieftains, chiefly found in the Ceded Districts, and in Salem: (6) grants for the maintenance of the dependants of similar chieftains, chiefly in the Northern Circars and in Madura: (7) *kuttabadis*, or lands held by police officials, chiefly in the Ceded Districts and North Arcot: (8) lands held for ordinary revenue and police service, in connection with the village community: and (9) lands held by various descriptions of village artisans. These two last classes have recently been practically abolished, as part of a comprehensive scheme of reform, by which in the future all village servants will receive remuneration by fixed salaries. The extensive *ináms* or revenue-free lands in Ganjám District held by the temple of Jagannath at Purí, belong to the first of these nine classes.

In 1858, an Inám Commission was appointed, with the object of definitely ascertaining the rights of the various classes of *inámdárs*, and of commuting service tenures into fee-simple. Possession for fifty years was decided to give a good title. In the case of personal

grants, the holder was offered the alternative of retaining the land subject to the liability of lapse, and without the power of alienation; or of enfranchising it by the payment of a moderate quit-rent or a lump sum. Service tenures, where the service was still performed, and religious endowments, were continued on the existing terms; where the services were no longer required, the holders were granted the same terms of commutation as in the case of personal grants. By the end of 1883–84, the total number of *ináms* confirmed was 444,496, with an area of 6,752,803 acres, on which the full assessment would have been £1,061,389. The old quit-rent of £94,268 has been raised to £166,495. The total cost of the operations of the Inám Commission has been £139,539; which cost is less by £41,131 than one year's revenue secured by it to Government, including the assessment of *ináms* fully assessed.

Manufactures. — Madras possesses few staple manufactures, apart from the village industries which supply the simple wants of the people. The preparation of the coffee-berry for export, scarcely a manufacture, was till lately the sole business carried on in the Presidency by European capital and under European supervision; with the exception of a little tea. There is nothing corresponding to the tea and opium of Bengal; and indigo, though largely manufactured in different parts of Madras, is of inferior quality. Repeated efforts have been made by English capitalists to introduce European methods of smelting iron in various parts of the Presidency, but hitherto these attempts have been uniformly unsuccessful. Almost the only example of a remunerative English factory was until quite lately the Aska Sugar Works in Ganjám, which manufactures sugar for export, and rum and rice-spirit for local consumption. The produce of this factory has repeatedly obtained honourable mention at exhibitions in Europe. The chief manufacturing industry of the Presidency is weaving.

Of recent years, however, mills and factories have been established in different parts of the Madras Presidency. In 1883–84, there were four cotton mills in Madras city, and one in Bellary. These mills turned out 94,451 cwt. of cotton yarn, twist, and cloth, of the value of £251,937. The Basel Mission weaving establishment at Mangalore in South Kánara produces excellent fabrics; and a native firm of that town has also set up looms.

The weaving industry was reported to have not recovered, up to 1882, from the effects of the famine of 1876–78. Up to the close of the last century, cotton goods constituted the main article of export to foreign countries. Masulipatam, where the first English factory on the Coromandel coast was established in 1611, enjoyed a special reputation for its chintzes, which were valued for the freshness and permanency of their dyes, the colours being brighter after washing than before. There is

still a small demand for these articles in Burma, the Straits, and the Persian Gulf; but Manchester goods have nearly beaten the Indian exporter out of the field. Native looms, however, still hold their own in the market, in face of strenuous foreign competition. In 1875-76, the total export of Madras cotton goods was valued at only £278,040, against an importation of English piece-goods and cotton twist to the aggregate value of £2,670,691. The manufacture of the famous *Arni* muslins of Chengalpat (Chingleput) is dying out.

According to the Census returns of 1871, there were 540,601 males engaged in manufactures, of whom nearly three-fourths were weavers. The Census of 1881 adopted the term 'industrial' in its classification, and under this heading returned 1,938,370 males and 1,476,125 females, of whom 742,737 males and 709,424 females were persons working and dealing in the textile fabrics and in dress. The number of actual weavers returned in the census of 1881 was 407,319 males and 535,247 females.

After weaving, working in metals appears to be the most widespread native industry. In 1871, the total number of males thus employed was 126,117, of whom blacksmiths numbered 40,000, and gold and silver smiths, 70,000. The workers in metals in 1881 numbered 151,414, of whom 52,235 were blacksmiths, 80,175 jewellers and goldsmiths, and 19,004 copper or other smiths. The remaining classes of village artisans comprise shoemakers, potters, weavers of baskets, tailors.

Among local specialities which have attracted European curiosity, may be mentioned the *swámi* jewellery, the gold and silver filigree work of Trichinopoli, the manufacture of ornaments and knickknacks of ivory and horn at Vizagapatam, and the carving of sandal-wood in South Kánara.

The more important of the remaining manufactories (other than salt) in the Madras Presidency, are the jute mill at Vizagapatam; the sugar factory in South Arcot, besides the old-established one at Aska in Ganjám; the tile and brick factories of the Basel Mission in South Kánara. South Kánara is also famous for the manufacture of superior coir matting. The extraction of oil from sandal-wood gave employment in 1883-84 to 520 persons in that District. More than 3000 gallons of sandal-wood oil were exported, valued at £21,000. Tough paper is made from aloes in Anantápur; and a rough kind of paper is also manufactured in Bellary and Madras city.

Salt Manufacture.—The sale of salt is practically a monopoly of Government, the manufacture being carried on mainly on its account, and under close supervision. The monopoly was created by Regulation I. of 1805, which at first applied to the whole Presidency, excepting the Districts of South Kánara and Malabar; in 1807, these two Districts

were included; but in 1871, the Salt Excise Act permitted the manufacture of salt, on private account, throughout the west coast Districts of the Presidency. The process employed is solar evaporation of sea water; and the entire coast-line on the east, from Orissa to Cape Comorin, affords natural facilities for the industry. On the west, a little salt is manufactured in South Kánara District, but the bulk of the supply is imported from Bombay. There are altogether 47 depôts in the Presidency; and the area of land occupied by salt-pans is about 27,000 acres. These are held as private property, the Government recognising a right of possession in the holders analogous to that of the *ráyatwárí* cultivation tenure.

The places of manufacture by the evaporation process are certain localities along the Coromandel coast. Most of them were chosen as sites before the creation of the monopoly, with a view to the nature of the soil, which should be a stiff clay. From the backwaters and inlets that abound along the coast-line, the salt water is baled up by means of the *picottah*, or native lever and bucket, into shallow reservoirs made by banking up the ground. When, after some days, the brine has partially condensed, it is let off into still shallower banked up enclosures or pans, the clay floors of which have been hardened by treading and ramming. A further process of evaporation now takes place, until the brine reaches the points of saturation, first of sulphate of lime (plaster of Paris), then of chloride of sodium (common salt), and lastly of sulphate of magnesium (Epsom salts), etc. During the second of these stages of saturation, salt is deposited on the clay floors of the pans in pure white cubic crystals, the size, solidity, and hardness of which increase with the depth of the brine in which they are formed and deposited. The art of the manufacturer is then to scrape up the salt crystals from off the black clay floor without soiling them, and before the condensation of the brine has proceeded far enough to cause the deposit of the more soluble salts of magnesium, etc., which it still contains. It requires no little skill to ascertain the exact degree of saturation without any sort of scientific appliances. The salt, when scraped off the pans, is heaped on a raised platform for a month or six weeks to dry; brine being again let into the pans, and a fresh coating of salt being secured. This process is repeated four or five times, according to the weather. Finally, the pans are drained quite dry of the residuum of brine or 'mother liquor,' at this stage of course highly charged with magnesian salts. They are re-trodden and re-rammed, and the manufacture proceeds as before.

The out-turn of salt is about 45 tons to the acre of evaporating surface per season; but much depends on the weather. A fall of rain a few days too early or a few days too late makes a difference of two or three hundred per cent. in the amount of the produce. The time for

commencing the preparation of the pans is the beginning of January, previous to which the Commissioner of Salt Revenue arranges what the salt requirements of the season are. The pans are portioned out, each man engaging to manufacture a certain quantity. The season for manufacture usually ceases when the July rains set in, but is occasionally prolonged until September. The saltmakers socially occupy the same position as the ordinary village *ráyat*, but a salt-pan is proportionately of considerably more value than the same extent of arable land. Salt labour is not popular, because the work must be carried on at the hottest period of the year; and because pure drinking water is not easily attainable in the localities suitable for the manufacture. Previous to the creation of the Government monopoly, the salt-producing grounds of the Northern Circars were farmed out or rented like other lands; but in some portions of the Karnátik, the salt produce, or its value in money, was divided between the Government and the cultivator. Until recently, a species of possession was recognised as inhering in the owner of a pan; and if discontinuance of the manufacture were ordered, Government paid compensation. Now, however, in opening new pans a written agreement is entered into with the manufacturers, reserving the right of Government to close the works when desirable without compensation. Under ordinary circumstances a salt-pan is recognised as real property, alienable by sale or otherwise.

The sale of salt at the depôts is free to all, and salt can be obtained for cash in as small a quantity as one *maund*. Salt purchased for re-sale at a distance is usually carried by Lambádies or Banjárás, a nomad race of petty traders whose home is the Central Provinces. Salt is conveyed by boat, by pack mules or donkeys, and by rail. The Madras trade in salt is almost solely in the hands of a few wholesale houses, which have their own depôts and agents in the interior Districts. The retail price as it falls on the ordinary inhabitant of the country is about one penny a pound; and it has been calculated that (inclusive of Mysore and Coorg) the average individual salt consumption is a little over twelve pounds a year. The Government, on receiving the salt at its depôts, pays a price called *kudivaram*, varying from 10 *pies* to 3 *annas* 7 *pies* per *maund* of $82\frac{2}{7}$ lbs., or approximately from $1\frac{3}{4}$d. to $7\frac{1}{2}$d. per cwt. The average of this payment is 1 *anna* 5·8 *pies* per *maund*, or about 3d. per cwt. The total cost to Government, including the expenses of supervision and every other item, is estimated at 3 *annas* 5·6 *pies* per *maund*, or about 7d. per cwt.

The price charged by Government to the consumer, or rather to the retail dealer, has varied considerably both in time and place. At the beginning of the present century (1805 to 1809) it was only 9 *annas* 4 *pies* per *maund*, or 1s. 7d. per cwt. After several changes, the price

charged by Government in Madras for salt remained stationary at 1 rupee per *maund*, or 2s. 8½d. per cwt., from 1844 to 1859. It was raised by degrees, during the next eighteen years, to a maximum of Rs. 2. 11 per *maund*, or 7s. 4d. per cwt., in 1877. A uniform salt duty of Rs. 2 per *maund*, or 5s. 5d. per cwt., has now been fixed for the whole of India. In Madras, 3 *annas* per *maund* are added as the cost of the salt itself. The price charged by Government for salt in Madras is therefore Rs. 2. 3, or 5s. 11½d. per cwt.

It should be always borne in mind that conversions into sterling in this work are made at the nominal official rate of 2s. to the rupee. At present the rupee is worth only about 1s. 6d.; so that the actual sterling prices are one quarter lower than the nominal ones.

In 1876–77, a Joint Commission, under the orders of the Government of India, investigated the salt administration of the Madras Presidency, and several of the recommendations made in their exhaustive Report are in course of execution. The importation of salt by Government from Bombay for the use of the west coast Districts has ceased, and the manufacture and sale of salt under a system of excise has been introduced. Government officers in no way interfere with the sale of excise salt. The owner is free to sell it when, to whom, and for what price he chooses. In 1882–83, 488,212 *maunds* of excise salt were stored, while the storage of the Government salt in the same year was over six million *maunds* (6,211,103). In addition, 760,639 *maunds* of salt were imported, chiefly from Portuguese territory and Arabia. The salt revenue in Madras for 1882–83 was £1,390,852. The cost of the salt preventive police was £15,993. The imported salt was principally for use in Malabar. A considerable export trade in salt formerly existed with Calcutta, Chittagong, Penang, and other places.

Salt is supplied to the French authorities at prime cost for sale at prices similar to British prices to the inhabitants of the French Settlements, the manufacture of salt by the French having ceased under the terms of a convention. The whole of Mysore and a part of the Nizám's territory in the Deccan, as well as the southern and eastern parts of the Central Provinces, are also supplied with salt taken by private trade from the Madras Presidency.

Formerly, the Salt Department was administered by the District officers under the orders of the Board of Revenue, and there was a large separate establishment for the superintendence of the manufacture and sale. From 1878, the District officers were relieved of the duty of salt supervision, and a departmental officer called the Commissioner of Salt Revenue was appointed for the whole Presidency. This officer is subordinate to the Board of Revenue in Madras.

History of Abkári in Madras.—The *abkári* or excise revenue of Madras Presidency is composed of all taxes, duties, and fees levied on the manu-

facture, distillation, or sale of spirituous intoxicating liquors and drugs, among which opium has to be included. Taxes upon the sale of intoxicants were known as a source of revenue, alike to the ancient Hindu and the more modern Muhammadan rulers. The English *abkárí* law for Madras dates from 1808; but while arrack and foreign spirits were included, toddy was originally excluded from the operation of the excise. The privilege of selling foreign spirits and the privilege of making arrack were farmed; and in addition, the licensing of separate stills (called the 'out-still' system) was adopted as an alternative mode. The out-still system was tried in Nellore, South Arcot, and Trichinopoli Districts, but proved unsuccessful; and in 1815, the renting system was in force all over the Presidency, except within the *abkárí* limits of Madras city. The regulations were consolidated into the Act of 1820, which practically lasted until the Abkárí Act iii. of 1864 became law.

The law of 1864 made little change in the law of 1820. The older law provided that the exclusive manufacture and sale of 'rum, arrack, or other fermented liquors' should either be retained under the direct management of Government or be rented out by them to farmers, while a subsidiary Regulation gave renters power to sub-let. Special provisions were also introduced against the use of noxious ingredients in the manufacture, and against irregularities in the liquor shops. The new law in 1864 added a provision bringing foreign imported wines and spirits under the chief enactment of 1820, and other clauses dealing with the regulation of toddy. Act iii. of 1864 has been amended by Act vii. of 1879. The amendments are principally in the direction of more stringent measures for the repression of illicit distillation, and the enlargement of the powers of the police and heads of villages for the detection of offences connected with the *abkárí* law. The *abkárí* of the city of Madras is regulated by a special enactment, Act xix. of 1852, subsequently amended in 1879.

The progress of the *abkárí* revenue of the Presidency since 1800 has been very marked. In 1800, the *abkárí* revenue was a little over £20,000; in 1807, it had risen to £70,000; and in three years more to £90,000. From 1810 to 1830, there was a steady rise; in 1832, the revenue was £180,000; but in 1833 a severe scarcity in some of the northern Districts caused the revenue to fall to £140,000. By 1842, the revenue again reached £180,000; in 1855, it was £225,000; in 1861, £300,000; in 1865, £420,000; in 1870, £610,000; in 1882–83, £645,840. The growth in the *abkárí* revenue since the commencement of the century is due partly to an enhanced taxation on spirituous and fermented liquors; but also in a great measure to increased consumption.

Arrack and Toddy.—The preparation of these two intoxicating liquors

is, like the manufacture and sale of salt, a Government monopoly. Arrack or country spirit, which may be described as a species of rum, is distilled from sugar or jaggery, the source of the sugar being either the cane, the palmyra, the cocoa-nut, or the date-palm. The Government exercise their monopoly in respect to arrack by farming out, under leases, the exclusive right of distillation and sale within entire Districts or parts of Districts to contractors, who guarantee a minimum excise revenue for each year of their lease. In the town of Madras, arrack is distilled by lessees of the Government distillery on account of Government, and the liquor is then issued to the retail dealers. These again contract to sell a certain minimum quantity of liquor in their respective shops at prescribed prices, and thus guarantee a minimum revenue from each shop. The annual consumption of arrack in the large towns of the Presidency is estimated to amount to an average of half a gallon per head of population. Distillation in Ganjám and in the coast *táluks* of Vizagapatam is rented to the owners of the rum factory at Aska. In the hill tracts of these two Districts, the spirit consumed is distilled from the flower of the *mahuá* tree (Bassia latifolia).

The preparation of toddy is a familiar process in every Madras village. In this case also, domestic manufacture and sale are forbidden, and the right of sale is farmed out to toddy-renters, the leases being put up to public auction. Toddy is the fermented juice of several kinds of palm. Throughout the northern Districts it is almost invariably made from the date-palm; in the southern Districts, from the cocoa-nut and the palmyra; and on the western coast, from the cocoa-nut. The juice from the date-palm is obtained by merely making an incision in the bark and allowing it to exude. The average produce is said to be 1 gallon per tree on every alternate day. The juice may be taken at any period of the year, but only during three months out of the twelve. In the case of the palmyra, the ends of the young shoots are cut and squeezed in a rude apparatus for eight days, after which time the juice begins to flow. The produce is about 2 bottles per day, the male trees yielding only from January to April, the female from February to May. Cocoa-nut toddy is obtained in a similar way, and the average produce is the same, but the trees are tapped for six months in the year.

In Karnúl (Kurnool), a spirit is distilled from *ippa* or *mahuá* flowers (Bassia latifolia); in the *zamíndárí* of Jaipur (Jeypore), a fermented liquor called *sauda* is brewed from grain, resembling the *pachwai* or rice-beer of Bengal; and in one *táluk* of Trichinopoli District, a spirit is distilled from rice. On the Nílgiri Hills and at Bellary, country beer is now manufactured by European firms, subject originally to an excise duty of 6d. per gallon. But recently the duty has been reduced

to 1½d. per gallon on condition that the alcoholic strength of the beer does not exceed 6 per cent.

Railways.—Two guaranteed railway companies, the Madras and the South Indian, have their lines almost entirely within the Presidency.

The Madras Railway, which connects at Ráichor with the Great Indian Peninsula system, runs thence south-east to Madras, and then west across the peninsula to Beypur, with branches to Bellary and Bangalore. Total length open in 1882, 861 miles, of which 818½ miles are single and 42½ miles are double line; number of stations, 116; capital expended, £11,154,450, or at the rate of £11,895 per mile; gross earnings, £691,857; net revenue, £257,084. The number of passengers carried by the Madras Railway in 1882 was 4,352,726, each passenger being conveyed an average distance of 47·4 miles. In the same year, the Madras Railway carried 480,637 tons of goods. The total quantity of food-grains carried by the Madras Railway was, in 1882, 124,161 tons; of salt, 51,506 tons; and of cotton, 21,100 tons. The block system is in use over the Madras Railway.

The South Indian Railway on the narrow gauge runs northward from Tuticorin to Madras, with branches to Tinnevelli, Negapatam, Erode, and Pondicherri. Total length in 1882, 655 miles; capital expended, £4,302,142; gross earnings, £375,871; net earnings, £140,232. The number of passengers carried by the South Indian Railway in 1882 was 3,843,046, the average distance travelled by each passenger being 38·8 miles. The South Indian Railway carried, in the same year, 415,403 tons of goods.

Both the Madras and South Indian Railways were of great service in carrying grain into the interior of the country during the famine of 1876–78. Without their aid, nothing could have prevented a most disastrous depopulation of the more distressed tracts.

A line in Mysore State, from Bangalore, connects Bangalore city with Mysore city; length, 86 miles. Another line from Bangalore to Gubbi was opened in 1884, for a length of 54 miles. This line is to be further continued to join the South Maráthá system. A projected line by a private company from Metapolliem, on the Nílgiri branch of the Madras Railway to Utakamand, to be called the Nílgiri-Righi Railway, is (1885) under the consideration of the Government of India, but the final terms of agreement have not been arrived at.

Water communication exists between Bezwára and Madras, and a railway following this route is under survey. Telephone communication has been established between Bangalore and Utakamand; and the Presidency is well supplied with telegraph lines.

Commerce and Trade.—The continuous seaboard of the Madras Presidency, without any natural harbours of the first rank, has tended to create a widely diffused trade. Madras city, as by far the chief

centre of population and the eastern terminus of the railway system, conducts nearly one-half of the total sea-borne commerce. Next comes Malabar District, containing the western railway terminus at Beypur; then Godávari District, with its cluster of ports along the fringe of the delta; Tinnevelli, with the new harbour at Tuticorin, which has opened large dealings with Ceylon; then Tanjore, South Kánara, Ganjám, and Vizagapatam Districts. As compared with the other Presidencies, the trade of Madras is broadly marked by the larger proportion assigned to coasting trade with other Indian ports and with Ceylon. Madras produces no great staple of export corresponding to the raw cotton of Bombay, or the jute, indigo, tea, and oil-seeds of Bengal. The aggregate excess of export value is comparatively much smaller in Madras than in the case of either of the other two Presidencies. The following table exhibits the principal items of foreign trade for 1875–76 and for 1883–84:—

FOREIGN TRADE OF THE MADRAS PRESIDENCY IN 1875–76.

IMPORTS (1875-76).		EXPORTS (1875-76).	
Cotton piece-goods,	£1,431,851	Coffee,	£1,661,111
Cotton twist,	1,238,840	Raw cotton,	1,652,849
Metals,	499,681	Hides and skins,	1,081,585
Railway stores,	459,529	Rice and paddy,	958,576
Rice and paddy,	357,330	Seeds,	586,690
Wearing apparel,	181,015	Indigo,	473,163
Timber,	151,762	Spices,	405,213
Raw silk,	141,037	Oils,	344,204
Spices and areca-nuts,	130,550	Cotton goods,	278,040
Spirits,	102,453	Provisions,	238,065
Wine,	83,574	Sugar,	194,083
Grain of sorts,	82,153	Coir and rope,	189,097
Provisions, etc.,	73,915	Cocoa-nuts,	114,460
Drugs and medicines,	60,452	Timber,	104,511
Malt liquors,	50,246	Tobacco,	73,234
Paper,	41,694	Dyes, other than indigo,	58,133
Woollen manufactures,	39,315	Grain of sorts,	38,593
Seeds,	28,412	Salt,	36,858
Glass,	27,564	Drugs,	31,259
Silk manufactures,	23,570	Horns,	22,591
Machinery,	21,478	Vegetables, etc.,	16,108
Tea,	21,420	Wax,	14,309
Coral,	17,691	Silk,	13,791
Wheat,	17,662	Saltpetre,	8,483
Books,	17,350	Hemp,	6,635
Stationery,	14,137	Mats,	5,714
Earthenware,	11,963	Wheat,	3,629
Dyeing materials,	10,107	Jewellery,	3,444
Miscellaneous,	1,085,954	Miscellaneous,	268,916
Total goods,	£6,422,705	Total goods,	£8,883,344
Government stores,	342,047	Treasure,	437,154
Government salt,	87,696		
Treasure,	956,208		
Grand total,	£7,808,656	Grand total,	£9,320,498

FOREIGN TRADE OF THE MADRAS PRESIDENCY IN 1883–84.

IMPORTS (1883–84).		EXPORTS (1883–84).	
Cotton piece-goods, . .	£1,643,142	Coffee, ...	£1,385,790
Cotton twist, . . .	845,030	Raw cotton, . . .	1,450,086
Metals, ...	375,102	Hides and skins, . .	1,747,338
Railway stores, . . .	53,347	Rice and paddy, . .	538,462
Rice and paddy, . .	25	Seeds, ...	674,411
Wearing apparel, . .	141,764	Indigo, ...	1,153,513
Timber, ...	20,671	Spices, ...	221,134
Spices and areca-nuts, .	269,866	Oils, ...	156,588
Spirits, ...	103,821	Cotton goods, twist, etc., .	399,056
Wine, ...	60,074	Provisions, . . .	72,030
Grain of sorts, . . .	215	Sugar, ...	685,425
Provisions, etc., . .	69,055	Coir and rope, . . .	99,300
Drugs and medicines, .	28,678	Cocoa-nuts, . . .	1,456
Malt liquors, . . .	40,236	Timber, ...	10,855
Paper, ...	44,956	Tobacco, ...	27,568
Woollen manufactures, .	26,762	Dyes, other than indigo, .	46,921
Seeds, ...	4,098	Grain of sorts, . . .	52,151
Glass, ...	19,978	Drugs, ...	54,585
Silk manufactures, . .	4,719	Horns, ...	24,609
Machinery, ...	60,562	Vegetables, ...	7,949
Tea, ...	1,028	Wax, ...	7,142
Coral, ...	23,488	Silk, ...	14,642
Wheat, ...	19	Tea, ...	24,986
Books, ...	18,865	Hemp, ...	8,722
Stationery, ...	23,771	Mats, ...	376
Earthenware, . . .	10,089	Wheat, ...	648
Dyeing materials, . .	2,892	Jewellery, ...	4,488
Miscellaneous, . . .	494,089	Miscellaneous, . . .	286,629
Total goods, . . .	£4,386,342	Total goods, . . .	£9,146,860
Government stores, . .	273,890	Government stores, . .	8,300
Government salt, . .	428	Treasure, ...	111,065
Treasure, ...	393,345		
Grand total, . . .	£5,054,005	Grand total, . . .	£9,266,225

The Madras coasting trade was returned as follows in 1883–84: trade with British Indian ports not within the Madras Presidency—imports, £3,089,008; exports, £2,568,619: trade with British Indian ports within the Presidency—imports, £1,591,236; exports, £1,471,745: trade with Indian ports other than British—imports, £50,597; exports, £280,156.

The number of vessels in the foreign trade that cleared and entered Madras ports in 1875–76 was 6866, with a tonnage of 1,208,745 tons. In 1883–84, the number entering and clearing was 5723; tonnage, 1,329,027 tons. Of these, 499 were steamers, with 733,566 tons; 184 sailing vessels, with 142,643 tons, were British; 73, with 20,724 tons, were Foreign; 2531, with 329,264 tons, were British Indian; and 2436, with 102,830 tons, were Native. In the same year, the coasting trade was conducted by 8346 vessels, with 1,722,065 tons, for other British Indian ports; 28,138 vessels, with 5,921,836 tons, for ports within the

Presidency; and 4130 vessels, with 414,622 tons, for Indian ports other than British.

The importance of this active coasting trade may be gathered from the fact, that in 1876–77 (the first year of famine) the imports of grain suddenly rose to 652,850 tons, valued at £6,156,224, of which by far the greater part consisted of rice from Bengal.

Excluding treasure, and transactions on account of Government, the total value of the sea-borne trade of the Madras Presidency in 1882–83 was over 20 millions (£20,083,187), of which nearly 12 millions represented the value of the exports, and over 8 millions the value of the imports. The following table shows the progress of the Presidency trade since 1871–72; the abnormal figures for 1877 and 1878 are due to the impetus given to importation during the continuance of famine in those years:—

SEA-BORNE TRADE OF THE MADRAS PRESIDENCY.

Years.	Exports.	Imports.	Total.
1871-72,	£11,296,150	£7,471,356	£18,767,506
1872-73,	10,020,137	7,538,255	17,558,392
1873-74,	11,212,573	7,743,152	18,955,725
1874-75,	10,697,845	7,904,299	18,602,144
1875-76,	10,666,508	7,663,454	18,329,962
1876-77,	11,141,124	12,431,210	23,572,334
1877-78,	10,127,990	15,822,510	25,950,500
1878-79,	9,606,925	8,399,525	18,006,450
1879-80,	11,018,593	6,937,652	17,956,245
1880-81,	10,706,623	7,509,255	18,215,878
1881-82,	11,019,474	7,332,426	18,351,900
1882-83,	11,869,301	8,213,886	20,083,187

Of the total, £20,083,187, returned for 1882–83, 64 per cent., or £12,853,239, represented the value of the foreign trade of the Presidency. Until recent years the average proportion of foreign trade but little exceeded 40 per cent., while the average proportion of the coasting trade, that is to say, the trade between the ports within the Presidency, was about 25 per cent. The foreign trade has of late years been increasing, and the coasting trade diminishing. In 1882–83, while, as has been already mentioned, the foreign trade was 64 per cent. of the whole, the Madras coasting trade was only 12½ per cent. The remaining 23½ per cent. of the trade is trade with other Presidencies and with non-British Indian ports.

The export trade of Madras Presidency consists chiefly of agricultural produce, cotton, oil or oil-seeds, grain, coffee, ginger, turmeric, dye-wood, indigo, hides, and skins. But the three staples of the export trade are hides and skins, coffee, and raw cotton. The imports consist mainly

of piece-goods, cotton-twist, metals, liquors, and miscellaneous western products. The export and import trade used to be mainly in the hands of European merchants, but native traders are now beginning to largely avail themselves of the facilities for direct communication with Europe instead of transacting European business with a local house of agency.

In 1882–83, the external trade, namely, the total external trade excepting that between ports within the Presidency, amounted in value to £17,563,618, or 87·5 per cent. of the whole trade. Of the whole amount, merchandise to the value of £9,461,543, and treasure to the value of £149,214, was carried through the Suez Canal.

Administration.—The supreme executive authority is vested in the Governor, with a Council of three members, of whom one is the Commander-in-Chief; the two others belong to the Covenanted Civil Service. The Commander-in-Chief is Second in Council, but by statute the senior Civilian member presides in the absence of the Governor. The appointment of the members of Council is made by the Queen.

For legislative purposes, the Council is increased by the addition of the Advocate-General of Madras, and from four to eight other members nominated by the Governor, of whom not less than one-half must be non-officials.

The cabinet system of administration, under which each member of the Executive Council of three deals with separate subjects, and refers special cases only to the whole Council, is to a certain extent carried out. It does not, however, prevail to the same degree as in the Viceroy's Council, and still less to the same degree as in a European cabinet. The following is a list of the departments among which the central administration is partitioned:—Financial, judicial, public, educational, political, ecclesiastical, marine, legislative, petition, revenue, pension, public works, railways, military.

The local or rural administration of Madras takes the District or *zilá* as its unit. Of these Districts there are 22 in all, including the newly-created Anantápur District, the Nílgiris, and Madras city. The two last-named occupy an exceptional position. Each of the remaining Districts is under the jurisdiction of a Collector and a Sessions Judge. The Collector combines the functions of a fiscal and a judicial officer. Beneath him come Assistants and Sub-Assistants who belong to the covenanted civil service, and Deputy-Collectors who are of the uncovenanted service.

Each District is sub-divided into *táluks* or *tálukas*, numbering 158 in all, under the charge of a *tahsíldár*. Each *táluk* comprises about 270 villages, which constitute the ultimate units for fiscal and administrative purposes. The population of an average *táluk* is about 190,000,

its area about 880 square miles, and the land revenue it pays annually £30,000. The hereditary officials, to be found in almost every Hindu village, have ever been utilized to perform minor public offices, revenue and judicial, being inadequately remunerated either by fees in grain and other cesses levied from the villagers, or by a partial reduction in their land assessment. The heads of villages and village accountants (*karnam*) collect and account for all revenue, rates, and taxes within their respective villages or townships.

In Madras, the village is the unit of *táluk* administration, and the *táluk* the unit of District management. The establishment of a *tahsíldár*, who administers the *táluk*, consists of a *sheristadár*, clerks, revenue inspectors and servants. The *sheristadár* is in immediate charge of the *táluk* treasury, and of its accounts, abstracts, registers, and periodical returns. The clerks prepare the accounts, bills, abstract cultivation statements, season, crop, and other agricultural returns, attend to correspondence, aid in magisterial work subordinately, and have charge of the office records, which under the *ráyatwárí* system are voluminous.

The revenue inspectors, of whom there are three or four, are in charge of portions of *táluks*, and pass constantly from village to village, seeing that the work of the village officer is properly performed, and conducting such local inquiries as may be considered necessary by the *tahsíldár*. In this capacity of revenue officer, the *tahsíldár* in Madras is assisted by officers styled 'deputy-*tahsíldárs*,' who are established in important towns and outlying parts of a *táluk*. Some of these deputy-*tahsíldárs* are in charge of large estates which do not fall within the jurisdiction of any *tahsíldár*. Each has a small office establishment. The yearly cost of the *tahsíldárí* establishment throughout the Presidency is returned at £146,000.

As the village is the unit of the *táluk*, and the *táluk* of the District administration, so the District is the unit of State management. The District officer, or as he is technically designated, the District Collector and Magistrate, has a territorial charge averaging 6400 square miles, and contributing a revenue of about £370,000. The District Collector has a general control over his sub-collectors and his assistants, who are covenanted civil servants, and over his deputy collectors, who are members of the uncovenanted civil service and in nearly every case natives of the country. The daily duties of the Collector are onerous and varied. He superintends all persons engaged in the administration of the revenue. He is responsible for the District treasury to which the *táluk* treasuries send their money, and for the large stock of stamps kept in his treasury. He has to see that the revenues are punctually realized. When arrears accrue, he has to direct proper processes of recovery. He manages the estates of minors. He determines boundary

disputes. He tries cases of official malversation, and claims to village offices. He hears and determines questions as to rent arising between landlord and tenant. He plays an important part in the municipal system which Act iii. of 1871 initiated, and he supervises the Local Funds raised for road and communications, primary education, hospitals, and sanitation. In the maritime Districts, the Collector controls the sea customs. He is expected to be thoroughly acquainted with the state of public opinion and the feeling of native States within the limits of his jurisdiction. He is, finally, the chief adviser of Government with regard to police, public works, education, sanitation, and the miscellaneous matters which conduce to the welfare and happiness of the District. The Collector has power to appoint all subordinate officers within his charge below the rank of deputy-*tahsíldár*. He nominates the *tahsíldár*, the deputy-*tahsíldár*, the head *sheristadár*, and the *sheristadárs* of *táluks*. The Board of Revenue must sanction the *sheristadár* appointments. The appointments of the *tahsíldár* and deputy-*tahsíldar* require the sanction of the Madras Government. Suspensions and dismissals of *táluk* officers are carried out as a rule under the orders of the Board of Revenue, which is, in this as in most other matters, the Collector's high controlling authority.

The Madras Board of Revenue consists of 3 members, with a secretary and a sub-secretary, a *sheristadár*, two assistants, and a manager. The main duties of the Board are to secure the punctual collection of the revenue; to tabulate and record all statistics with regard to population, agriculture, exports and imports, health, and the condition and advancement of the country; to manage the expenditure of local and special funds; to take charge of the estates of minors as a Court of Wards; to ensure the proper application of endowments; and to decide the frequent appeals which result from a system in which the Government is concerned directly with peasant proprietors.

Governors of Madras under British Rule. — The Madras factory was under the jurisdiction of Bantam in Java from its foundation in 1639 till it was itself created a Presidency in 1653. In 1658, the factories in Bengal were subordinated to Madras, and so remained till 1681. Mr. Aaron Baker, who was the 'Agent' for the factory of Madras in 1653, became the first Governor on Madras being created a Presidency in that year. The following is a list of the Governors of Madras from 1653 to 1885:—Mr. Aaron Baker (1653), Sir Thomas Chamber (1659), Sir Edward Winter (1661), Mr. George Foxcroft (1668), Sir William Langhorn (1670), Mr. Streynsham Master (1678), Mr. William Gyfford (1681), Mr. Elihu Yale (1687), Mr. Nathaniel Higginson (1692), Mr. Thomas Pitt (1698), Mr. Gulston Addison (1709), Mr. Edmund Montague (*acting*, 1709), Mr. William Fraser

(*acting*, 1709), Mr. Edward Harrison (1711), Mr. Joseph Collet (1717), Mr. Francis Hastings (*acting*, 1720), Mr. Nathaniel Elwich (1721), Mr. James Macrae (1725), Mr. George Morton Pitt (1730), Mr. Richard Benyon (1735), Mr. Nicholas Morse (1743);—Madras having been captured by the French on the 10th September 1746, the government of the Settlement devolved on Mr. John Hinde, the Deputy-Governor of Fort St. David; Mr. Charles Floyer (1747), Mr. Thomas Saunders (1750); the seat of the government was re-established at Madras on the 5th April 1752, four years after its restoration to the English by the treaty of Aix-la-Chapelle;—Mr. George Pigot (afterwards Lord Pigot, 1755), Mr. Robert Palk (1763), Mr. Charles Bourchier (1767), Mr. Josias Du Pre (1770), Mr. Alexander Wynch (1773), Lord Pigot (*second time*, 1775), Mr. George Stratton (1776), Mr. John Whitehill (*acting*, 1777), Sir Thomas Rumbold (1778), Mr. John Whitehill (*acting second time*, 1780), Mr. Charles Smith (*acting*, 1780), Lord Macartney (1781), Mr. Alexander Davidson (1785), Sir Archibald Campbell, K.B. (1786), Mr. John Holland (*acting*, 1789), Mr. Edward Holland (*acting*, 1790), Major-General William Medows (1790), Sir Charles Oakeley (1792), Lord Hobart (1794), Lieut.-General George Harris (*Commander-in-Chief, acting*, 1798), Lord Clive (1798), Lord William Bentinck (1803), Mr. William Petrie (*acting*, 1807), Sir George Hilaro Barlow, K.B. (1807), Lieut.-General The Hon. John Abercromby (*Commander-in-Chief and temporary Governor*, 1813), The Right Hon. Hugh Elliot (1814), Sir Thomas Munro, K.C.B. (1820), Mr. Henry Sullivan Græme (*acting*, 1827), Mr. Stephen Rumbold Lushington (1827), Sir Frederick Adam, K.C.B. (1832), Mr. George Edward Russell (*acting*, 1837), Lord Elphinstone (1837), Marquis of Tweeddale, C.B. (1842), Mr. Henry Dickinson (*acting*, 1848), Sir Henry Pottinger, G.C.B. (1848), Mr. Daniel Elliott (*acting*, 1854), Lord Harris (1854), Sir Charles Edward Trevelyan, K.C.B. (1859), Mr. William Ambrose Morehead (*acting*, 1860), Sir Henry George Ward, G.C.M.G. (1860), Mr. William Ambrose Morehead (*acting second time*, 1860), Sir William Thomas Dennison, K.C.B. (1861), Mr. Edward Maltby (*acting*, 1863), Lord Napier of Merchistoun (1866), Mr. Alexander John Arbuthnot, C.S.I. (*acting*, 1872), Lord Hobart (1872), Mr. William Rose Robinson (*acting*, 1875), The Duke of Buckingham and Chandos (1875), Right Hon. William Patrick Adam (1880), Mr. William Hudleston, C.S.I. (*acting*, 1881), The Right Hon. Mountstuart Elphinstone Grant Duff, C.I.E. (1881).

Local and Municipal Administration, including roads and communications, schools and primary education, public health and endowments, together with the special taxation levied for any of these purposes, is provided for by uniform legislation throughout the Presidency.

As respects population generally, entire Districts, or where these are of unmanageable size, parts of Districts have been constituted into Local Fund Circles, each under the management of a Board of Commissioners. The Board is usually a mixed body, consisting of official and non-official or representative members. To the Local Fund Board thus constituted is entrusted, in the Madras Presidency, the management of the above-named local interests, subject to the submission of their annual budget of income and proposed expenditure for the sanction of Government, and of an annual report of the transactions of the Board for the year, at its close. The Government confides to the management of the Local Fund Boards any assignment made from the provincial treasury towards the various local interests under their care. The 22 Districts of the Presidency comprise 30 such Local Fund Circles. The sources of income at the disposal of these Boards are the proceeds of a special land rate, not exceeding 1 *anna* per rupee, or three-farthings in every shilling, of the Government assessment on the land, tolls, school fees, local endowments, and other minor special and miscellaneous funds placed by Government at their disposal.

Municipal administration of the larger towns throughout the Presidency is also provided for by Boards of Town Commissioners, somewhat similarly constituted as respects official and non-official members, except that the principle of election by the ratepayers has received of late an important extension (1884). Besides the above-named local interests, the municipal Boards or Commissioners manage the local sanitation and hospitals, registration of births and deaths, lighting, etc., within their respective charges; and raise the subsidy (three-fourths of the entire cost) required, and maintain the police of their towns.

In 1882–83, there were 47 municipal towns in Madras Presidency, excluding Madras city, administered under the Act. The elective system was in operation in 12 of the municipalities. The aggregate receipts in 1882–83 were £165,784; and the expenditure, £143,937, including £10,345 paid to the imperial treasury on account of licence tax. On public works, £30,910 was expended during the year, including cost of establishment. The incidence of municipal taxation varied from 5¾d. per head of municipal population in Pálghát to 5s. in Utakamand. The average incidence was 1s. 0½d. per head. The yearly income at the disposal of the municipal Commissioners consisted of rates (not exceeding 10 per cent. of the rent value), on houses and lands within the township, a tax on professions, callings, and arts exercised therein (the ratepayers being classified at scheduled rates), a wheel and animal tax, tolls and ferries, school and market

fees, and other miscellaneous sources. The aggregate population of the 47 municipalities, excluding Madras city, in the Presidency, was 1,323,970. Of the total number of municipal Commissioners in 1884 (754), Europeans and Eurasians numbered 248, and natives 506. Of the whole number, 314 were officials, and 440 non-officials. For the figures of the municipality of Madras city, see MADRAS CITY.

Under the administration of Local Fund and Municipal Boards, a great impulse has been given to the development of roads and communications, schools and primary instruction, dispensaries and hospitals throughout the country.

Revenue and Expenditure.—The finances of the Presidency require to be considered under four heads—Imperial, Provincial, Local, and Municipal. Down to the year 1871, every branch of revenue and expenditure throughout India was managed in all details by the Government of India, and practically the first head of finance alone existed. In 1871, Lord Mayo introduced a scheme for decentralizing the finances, and what are known as Provincial Funds were brought into existence. By this decentralization scheme, the financial administration—under rules framed by the Government of India—of the jail, police, and educational services, together with certain branches of the medical, sanitary, and other minor services, and the printing pertaining to each, was transferred to the Government of Madras. A lump grant from imperial funds equal to the aggregate of the budget grants of the previous year (less 5 per cent.), for each of the services transferred, was assigned at the same time, on condition that no further demand should be made on the imperial treasury for any of the transferred services; while on the other hand, the Local Government was at liberty to apply savings or improved incomes, under the various heads of administration, to the needful expansion and improvement of the services thus become Provincial. The aggregate lump grant in 1875 amounted to about £835,000, and until 1883 constituted, with improved local income and other miscellaneous revenue, the Provincial treasury of the Presidency, applicable to the services transferred to local control.

From the commencement of 1882–83, a revised decentralization scheme was introduced throughout India. Under this new scheme, instead of each Local Government receiving a fixed lump sum of money to make good any excess of provincialized expenditure over provincialized receipts, as was the case under the previous scheme, a proportion of the imperial revenues of each Province is now devoted to this object. Certain heads, as few in number as possible, are wholly or with minute local exceptions reserved as Imperial; others are divided in proportions for the most part equal between Imperial and Provincial; the rest are

wholly or with minute local exceptions made Provincial. The balance of transfers being against the Local Governments is rectified by a fixed percentage of the land revenue. The agreement with the Madras Presidency provides as follows:—All receipts from tributes and gain by exchange are wholly Imperial, those from customs, salt, interest, and railways, are, with trifling exceptions, also Imperial. The receipts from excise, assessed taxes, stamps, and registration, are divided equally between Imperial and Provincial; those from forests, minor departments, law and justice, police, marine, education, medical, stationery and printing, are wholly Provincial; while the receipts from pensions, miscellaneous, irrigation and navigation, and other public works are, with certain exceptions, also Provincial. The division of the charges is roughly as follows:—All charges under interest on debt, interest on service funds and other accounts, salt, ecclesiastical, allowances and assignments, political, civil furlough and absentee allowances, railway, and loss by exchange, are wholly, or with slight exceptions, Imperial. The charges under excise, assessed taxes, stamps and registration, are divided equally between Imperial and Provincial. Those under land revenue, forest, customs, district post-office, law and justice, marine, education, and medical are wholly Provincial; while the charges under administration, minor departments, police, superannuations, miscellaneous and other public works, are, with small exceptions, also Provincial. Under refunds and drawbacks, each Government bears the amount appertaining to its share of the revenues. Under stationery and printing, the Imperial Government bears all the charges connected with the purchase of stationery for central stores, while the Provincial Government defrays the cost of all stationery supplied to public departments, with the exception of the Postal and Telegraph departments.

The charges made Provincial under the scheme above described, being in excess of the receipts made Provincial, a further grant was made to the Provincial Government of a share of the land revenue receipts sufficient to counterbalance this excess in the charges. The proportion which the sum so transferred bore to £4,510,000, the normal land revenue of Madras, was 28 8 per cent.; and a similar percentage of the actual land revenue of each succeeding year becomes under the scheme the Provincial share of the revenue, the Provincial Government benefiting under this head as it does from all other heads in which it shares by any increase in the receipts of the year. The effect of the last decentralization scheme has been to hand over to the Madras Government a growing revenue, amounting in the first year to the estimated sum of £2,184,310, to meet an expenditure in the first year of £2,161,910, and provide the surplus of £22,400, which would have

accrued to Provincial under the previous scheme. The Provincial receipts and charges of the year 1882-83 were respectively £2,362,500 and £2,252,500, the resulting surplus of £110,000 being £87,500 in excess of the standard surplus.

Legislative Acts have defined the sources of revenue of the Municipal Commissioners throughout Madras, and established Local Funds with Boards of administration in every rural circle. Revenue and expenditure under these two last heads of finance are entirely at the disposal and under the management of local authorities, together with any subsidy from the provincial budget for the services under the management of the Commissioners and Boards.

The following tables exhibit the main items of civil expenditure and revenue in 1875-76 and in 1883-84. Considerable modifications have since taken place in the form of accounts; and the tables for 1875-76 are not strictly comparable with the revenue and expenditure at present. They are retained, however, as they throw light upon the system which then prevailed. The figures for 1883-84 will be summarized in the paragraph which follows them. Attention should also be drawn to the fact that certain important headings of expenditure, viz. army and imperial public works, are not given in the tables for 1875-76, which deal only with the civil and general administration :—

FINANCES OF THE MADRAS PRESIDENCY FOR 1875-76.

TABLE I. (IMPERIAL).

REVENUE.		EXPENDITURE.	
Land revenue,	£4,545,013	Land revenue,	£444,814
Tribute, etc.,	344,643	Forests,	43,018
Forests,	42,772	Excise,	19,704
Excise,	633,901	Customs,	18,728
Customs,	307,962	Salt,	187,038
Salt,	1,353,789	Stamps,	13,673
Stamps,	501,971	Post-office,	76,030
Post-office,	97,225	Administration,	122,444
Law and justice,	43,379	Law and justice,	361,958
Superannuation receipts,	244,234	Ecclesiastical,	38,314
Miscellaneous,	56,275	Medical,	31,258
		Political agencies,	11,940
		Allowances and assignments,	245,064
		Superannuation,	153,940
		Loss by exchange,	30,564
		Allotments for provincial services,	835,571
		Miscellaneous,	136,860
Total,	£8,171,164	Total,	£2,770,918

FINANCES OF THE MADRAS PRESIDENCY FOR 1875-76 (*continued*).

TABLE II. (PROVINCIAL).

REVENUE.		EXPENDITURE.	
Imperial allotment,	£835,571	Jails,	£105,753
Jails,	25,652	Registration,	26,656
Registration,	38,053	Police,	357,991
Police,	3,768	Education,	87,539
Education,	2,870	Medical,	55,657
Medical,	3,135	Printing,	24,636
Printing,	2,672	Contributions,	122,198
Miscellaneous,	23,766	Public works,	107,902
		Miscellaneous,	57,698
Total,	£935,487	Total,	£946,030

TABLE III. (LOCAL).

REVENUE.		EXPENDITURE.	
Provincial allotment,	£122,198	Public works,	£472,204
Special funds,	35,792	Education,	42,259
Land cess and tolls,	376,964	Dispensaries,	14,180
School fees,	2,237	Vaccination,	7,895
Endowments,	30,275	Sanitation,	28,730
Public works,	14,696	Markets, etc.,	20,963
Miscellaneous,	32,804	Miscellaneous,	30,048
Total,	£614,966	Total,	£616,279

TABLE IV. (MUNICIPAL).

REVENUE.		EXPENDITURE.	
Madras city,	£55,849	Madras city,	£65,091
Other Municipalities—		Other Municipalities—	
Provincial and local allotment,	£9,083	Public works,	£35,748
Tax on houses and lands,	30,832	Education,	5,519
Tolls and ferries,	33,971	Hospitals, etc.,	19,894
Profession tax,	4,116	Conservancy,	29,512
Tax on vehicles,	4,412	Lighting,	6,597
Tax on animals,	4,965	Supervision, etc.,	10,071
Licence fees,	2,109	Miscellaneous,	8,477
Miscellaneous,	24,149	Total,	£115,818
Total,	£113,637		
Grand total (municipal),	£169,486	Grand total (municipal),	£180,909

The above tables show a gross revenue for the Madras Presidency, under all heads, of £9,891,103; and a total expenditure on civil administration of £4,514,136. But there are items on both sides which are matters of account, or other than actual taxation or outlay on administration.

FINANCES OF THE MADRAS PRESIDENCY for 1883–84.

TABLE I. (IMPERIAL).

REVENUE.		EXPENDITURE.	
Land revenue,	£4,741,399	Land revenue,	£619,202
Tribute,	344,643	Excise,	20,318
Excise,	661,198	Customs,	31,240
Customs,	115,860	Salt,	206,485
Salt,	1,385,513	Stamps,	15,520
Stamps,	562,486	Post-office,	504,073
Post-office,	465,260	Civil and political—Establishment and contingencies,	152,130
Superannuation receipts,	36,940	Ecclesiastical,	34,222
Registration,	63,207	Superannuation,	183,822
Telegraph,	65,796	Registration,	48,263
Public works,	21,332	Telegraph,	118,404
Military,	209,222	Refunds and drawbacks,	51,578
Assessed taxes,	46,627	Military,	2,648,863
Miscellaneous,	20,131	Marine,	1,121
		Public works { Civil,	48,064
		Public works { Military,	59,018
		Public works { Irrigation,	474,447
		Loss by exchange,	236,782
		Allotments for provincial services,	1,519,576
		Assessed taxes,	680
		Miscellaneous,	38,000
		Total,	£7,011,808
		Deduct provincial contribution to Imperial expenditure,	187,671
Total,	£8,739,614	Net total,	£6,824,137

TABLE II. (PROVINCIAL).

REVENUE.		EXPENDITURE.	
Imperial allotment,	£1,519,576	Prisons,	£78,905
Education,	21,257	Police,	364,530
Medical,	10,816	Education,	113,975
Stationery and printing,	7,288	Medical,	108,453
Forest,	95,178	Stationery and printing,	85,113
Law and justice,	58,065	Provincial contribution to Imperial expenditure,	187,671
Police,	10,465	Irrigation and navigation,	33.324
Marine,	545	Buildings, roads, and service,	244,263
Scientific and other minor departments,	14,617	Judicial,	382,216
Public works and irrigation,	20,170	Famine relief,	3,266
Superannuation and pensions,	2,328	Unfettered local funds,	26,053
Unfettered local funds,	23,709	Forests,	79,675
Miscellaneous,	7,897	Refunds and drawbacks,	6,217
		Miscellaneous,	68,753
Total,	£1,791,981	Total,	£1,782,414

FINANCES OF THE MADRAS PRESIDENCY FOR 1883-84 (*continued*).

TABLE III. (LOCAL).

REVENUE.		EXPENDITURE.	
Local funds—		Local funds—	
Rates and cesses on land,	£435,742	Public works, . . .	£390,006
Education, . . .	6,235	Education, . . .	65,638
Medical, . . .	2,120	Hospitals and dispensaries,	52,443
Public works, . .	50,720	Sanitation, public and charitable institutions,	46,018
Miscellaneous, . .	46,123	Miscellaneous, . .	11,901
Other funds—		Other funds—	
Village service, . .	333,992	Village service, . .	313,660
Irrigation cess, . .	4,245	Irrigation cess, . .	4,124
Canal and ferry, . .	16,175	Canal and ferry, . .	4,445
Police lodging, . .	2,325	Police lodging, . .	2,465
Book depôt, . . .	6,102	Book depôt, . . .	5,333
Port and other funds, .	62,331	Port and other funds, .	55,501
		Refunds and drawbacks, .	1,317
Total, . . .	£966,110	Total, . . .	£952,851

TABLE IV. (MUNICIPAL).

REVENUE.		EXPENDITURE.	
Madras city, . . .	£126,339	Madras city, . . .	£140,451
Other Municipalities—		Other Municipalities—	
Tax on houses and lands,	£44,846	Public works, . .	£39,080
Tolls and ferries, . .	27,537	Education, . . .	15,033
Tax on vehicles and animals and registration of carts, . . .	11,523	Hospitals and dispensaries,	19,484
		Conservancy, . .	37,500
		Lighting, . . .	5,904
Licence fees, . .	1,908	Vaccination, . . .	1,310
Profession tax, . .	14,058	Registration of births and deaths, . .	838
Miscellaneous, . .	40,751	Supervision, . . .	11,323
		Miscellaneous, . .	13,424
Total, . . .	£140,623	Total, . . .	£143,896
Add collection of imperial licence tax, . . .	9,473	Licence tax paid to Government, ...	8,874
Total, ...	£150,096	Total, ...	£152,770
Grand total (municipal),	£276,435	Grand total (municipal),	£293,221

The above tables show a gross revenue in 1883-84 for the Madras Presidency, under all heads, of £10,254,564; and a total expenditure on administration of £8,333,047. The most important items of imperial receipts are—land revenue, salt, stamps, excise, opium, sea customs, and assessed taxes. In 1883-84, the average incidence of taxation per head of population derived from each of these sources of revenue throughout the Presidency was—land revenue, 3s. 1d.; salt, 9½d.; stamps, 4¼d.; excise, 4⅝d.; opium, 0½d.; sea customs, 0¾d.; and assessed taxes, 0⅝d.

The Madras Army is a relic of the days when India was apportioned out between the three historical Presidencies. At the present time it garrisons the Nizám's Dominions, the Central Provinces, and British

Burma; while a Madras Native infantry regiment is usually stationed at Doranda, in the Chutiá Nágpur Division of Bengal, and another at Cuttack in Orissa. The important cantonment of Bangalore, which lies in Mysore State, was, on the rendition of that State, maintained. The force under the Madras Commander-in-Chief consisted in 1882–83 of 2 regiments of European cavalry, 16 batteries of European artillery, 9 regiments of European infantry, and 1 regiment of European sappers. The Native forces consist of 1 regiment of Native sappers and miners, 4 regiments of Native cavalry, and 32 regiments of Native infantry. In 1882–83, the strength of the European army amounted to 434 officers and 10,876 non-commissioned officers and men—total, 11,310. The Native army included 341 European officers attached, 556 Native commissioned officers, 1455 non-commissioned officers, and 26,519 men—total of Native army, 28,871; grand total, 40,181 officers and men.

The death-rate among the European troops during the 14 years ending 1883 has averaged 1·56 per cent. of the total strength. The death-rate in 1882–83 was 1·02 per cent. In the same year, 7 lock hospitals were open in the Presidency, with 2430 patients. Gunpowder to the amount of 149,000 lbs. was manufactured in the Presidency arsenals during the year. The total military expenditure charged against Madras in 1876–77 was £2,845,793; and in 1882–83, £2,693,447.

The number of pensioners on the pension-roll of the Madras army in 1883 was 32,175; amount of pensions paid, £235,484. Bread is supplied departmentally to the army at Bangalore, Madras, Sikandarábád, Rangoon, Taunghu, and Thayet-myo; at which places there are Government bakeries. Indian tea is supplied to the army at 1s. 0½d. a lb.; quantity used in 1882–83, 139,947 lbs. Horses are purchased for remounts, mostly in Australia, at an average cost of £54 each. An attempt has been made to rear mules for the army, but has not succeeded. The principal cantonments are Kámptí for Nágpur, Sikandarábád for Haidarábád, Bangalore, Bellary, and Rangoon. St. Thomas' Mount, near Madras city, is an important station for artillery. The Amrita Mahal or breeding establishment for commissariat cattle, with herds averaging 10,000 head, is at Húnsúr in Mysore; the remount depôt for cavalry and artillery is at Hosúr (Usúr), in Salem District. The two sanitariums are Ramandrúg, near Bellary, and Jakatála or Wellington on the Nílgiri Hills.

Police.—The system of watch and ward which was found to prevail throughout Southern India when the English rule first spread over its Provinces, was the ancient hereditary Kávili system. Under it, the tribes most likely to prey on their neighbours were employed to protect the property of their less thievish countrymen, and had to make good all losses incurred. The Kávilgárs levied contributions

and taxes from all property to which they extended their forbearance, or which they guaranteed against loss. A quota of all crops grown in the village, a rate on houses, a tax on professions (the *mutarfa* tax was originally a Kávili tax), a transit duty on articles transported by the roads, etc., formed the bulk of their demands. In the larger part of the Presidency, the Kávili system was in the main a village watch and ward, but in the southern Tamil Districts the system had a far more oppressive organization. The heads of the Kávili races, Pálegárs, Mén-Kávilgárs, and the like, assumed the leadership of the Kávili organization, and levied exactions of all kinds from their helpless and timid fellow-countrymen over wide areas, proving a most lawless and oppressive class in the system.

Measures were taken, with more or less success, in the early stages of English administration, to relieve these men of responsibilities, and suppress their tyranny; their *inám* lands were resumed, their levy of contributions was interdicted, but many years passed before clandestine oppression died out. The village watch (*stala-kávil*) was everywhere retained, and constitutes the village police of the country at the present day, under whatever local appellation known. By the Regulation of 1866, the village police was placed under the head of the village, and became practically the most useful (though somewhat dishonest) agent of the Magistrate in the police administration of the country. Since the reorganization of the general police, the village police has been brought into effective co-operation with that body in the maintenance of peace and order throughout the country.

The Madras police was reorganized in 1860. In 1875–76, it consisted of a total strength of 23,404 officers and men, being 1 man to 6 square miles of area, including waste and hill tracts, and to every 1527 of the population. In 1882–83, it numbered 23,696 officers and men, maintained at a total cost of £386,721, almost entirely defrayed from provincial funds. The proportion of police to population and area in 1882–83 was 1 man to 1470 people, and to each 6 square miles of area. In towns, the proportion of police was (1882), 1 man to 592 people; and in the rural parts, 1 man to 1609 people. The average cost of a policeman was £16, 17s. 4½d., or nearly 3d. per head of the population. Taking the total strength by detail, there were in 1882–83, 20,556 District police, 1208 police of Madras town, 672 men of the salt preventive force, 224 officers connected with land customs, and 1036 jail guards. Of the entire police force, 69 per cent. are able to read and write. The death-rate averages 12 per thousand. Number of warrants executed in 1882–83 by the police, 47,233; number of criminal summons served, 477,102; civil summons, 330,241. A list is kept by the police authorities of 17,436 known depredators, 4167 suspected persons, and 23,409 members of wandering gangs.

Criminal Statistics.—In 1882, the number of offences reported to the police, cognizable under the Penal Code, was 102,049, while the number of offences reported to the police, under special local laws, was 101,868. In the former class of cases, 34,611 convictions were obtained, and 52 per cent. of the persons tried were convicted. In the latter class of cases, 86,653 convictions were obtained, and 87·8 per cent. of the persons tried were convicted. The amount of property lost in 1882 was valued at £123,151, and £26,497, or 21 per cent. of the value, was recovered by police agency. Criminal offences against the person (including 252 murders) numbered 41,704. Convictions were obtained in 58 per cent. of these cases. There were 8061 cases for breach of the salt and revenue laws.

Jails.—In 1882, there were 33 jails in the Presidency, including six central jails, the European prison, the penitentiary, and the debtors' prison at Madras. Prisoners in these jails in 1882–83 numbered 23,317, the daily average being 8877. The total prison population of the Presidency was 25,956 (inclusive of subsidiary lock-ups), of whom 1675 were women. The total cost in 1882–83 under all items amounted to £70,090, or an average of £7, 16s. 11¾d. per head. The financial result of jail manufactures in 1875, after making allowance for the value of goods supplied to Government, showed a net profit of £14,065, or an average of £1, 14s. per manufacturing prisoner. In 1882–83, the profits from jail manufactures were £8894. The total number of deaths in jail in 1882–83 was 397, at the rate of 40·7 per thousand. There are 304 subsidiary jails or lock-ups in the Presidency, with an average daily population in 1882 of about 1000.

Education.—During the early days of British rule, education was left to the voluntary activity of the missionaries and the indigenous village schoolmasters. In 1852–53, the total amount expended by Government on this account was only £4556. The present system dates from 1855, in which year the Madras University was remodelled, a staff of local inspectors was appointed, the system of grants-in-aid was organized, and several private institutions were brought under the Educational Department. In 1855, the number of institutions of all kinds in the Presidency was 13,766, and the number of pupils in attendance 204,856. The reforms of 1871 led to the establishment of numerous elementary schools, supported by local taxation.

In 1882–83, the total number of institutions and schools of all kinds in the Presidency was 17,494, attended by 446,324 pupils. These figures, however, are exclusive of many unaided and uninspected indigenous institutions. According to the Census of 1881, there were in that year 514,872 boys and 39,104 girls under instruction in the Presidency; besides 1,515,061 males and 94,013 females able to read and write, but not under instruction.

The Departmental institutions of the Madras Presidency in 1882 included 29 arts colleges (number of pupils, 2112); 3 professional colleges (number of pupils, 217); 94 high schools for boys (English) (number of pupils, 6045); 720 middle schools for boys (number of pupils, 21,203); 16 high schools for girls (number of pupils, 76); 107 middle schools for girls (number of pupils, 900); 1558 English teaching primary schools for boys (71,254 pupils); 14,284 vernacular primary schools for boys (316,075 pupils); 111 English teaching primary schools for girls (5078 pupils); 522 vernacular primary schools for girls (21,592 pupils); 36 normal schools for masters (978 pupils); 4 normal schools for mistresses (197 pupils); and 10 professional and technical schools, with 597 pupils. The school fee revenue under the Department has risen 50 per cent. in the decade since 1872, and in 1882 was £16,229. The school fee income of all public and private institutions was £104,361 in 1882, against £61,110 in 1872.

During the ten years ending 1882–83, a total of 28,575 candidates attempted the entrance examination of the Madras University, of whom 9715 passed; 2153 passed the first arts examination, 896 graduated B.A., and 22 M.A. with honours, 104 passed in law, 90 in medicine, and 18 in civil engineering. The returns received for the first edition of this work showed that out of 1250 students who matriculated in 1876–77, 744 were Bráhmans, 329 Hindus of other castes, 19 Muhammadans, 85 native Christians, 41 Eurasians, and 32 Europeans. In 1882, 7 candidates applied for the degree of M.A., and 2 passed the tests. For the B.A. degree, 221 candidates were examined, and 120 passed. For the first arts examination there were 783 candidates, of whom 279 passed. Eight out of 68 candidates passed in law; 4 in medicine. The number of candidates registered for entrance in 1882 was 4686; and of these 1634 matriculated.

The number of female scholars in 1882–83 was returned at 43,671. Primary instruction is in the main entrusted by Government, under strict inspection, but very moderate subsidy, to the management of Local Fund and Municipal Boards and private enterprise. All expansion must be looked for from these authorities. The educational wants of the Europeans and Eurasians of the Presidency are fairly provided for. In 1882–83, 3381 boys and 2755 girls of these classes were under instruction, total 6136, nearly equal to the school-going population of the ordinary school age.

The expenditure of Government on education in the Madras Presidency is devoted to direction and inspection, and the encouragement of higher and middle education. The system has been eminently successful. It has been calculated that about one and a quarter million sterling had been expended by Government on higher education within the Presidency between 1853 and 1883. No equal amount ever spent

in India has produced higher and more lasting results. A very great deal, however, yet remains to be done. The most recent figures available, those of 1882–83, show the number of departmental schools at 17,500, and the number of all sorts of schools taken together as probably not exceeding 20,000. The population of the Presidency is over 31,000,000; so that at present there exists only one school on the average for every 3100 people and every 8 square miles of area.

Medical Aspects.—The climate of Madras varies in the different parts of the Presidency, being determined by the very diverse geographical conditions. The Nílgiri Hills enjoy the climate of the temperate zone, with a moderate rainfall, and a thermometer rarely exceeding 80° F., and sometimes falling to freezing-point. In 1881, the mean annual temperature in the shade at the sanitarium of Wellington was 60·9° F. On the tropical Malabar coast, the south-west monsoon brings an excessive rainfall, reaching 150 inches in the year at places. The rain-clouds hanging on the slope of the Western Gháts sometimes obscure the sun for several months. Along the eastern coast and on the central table-lands, the rainfall is comparatively low, but the heat of the summer months is excessive. At Masulipatam, the thermometer frequently rises to above 110° F. in the shade, and to 170° in the sun. In 1882–83, the readings of heat maxima in the shade over the Presidency varied from 112° at Masulipatam to 80° at Wellington. The rainfall in the same year varied from 20 inches at Bellary to 154 at Mangalore, 165 at Cochin, and 203 at Merkára, the capital of Coorg. Observations extending over a period of sixty-nine years give an average of 48·7 inches of rain in the year at Madras city; but this is considerably above the mean of the east coast generally. At Bellary the average annual rainfall does not exceed 18 inches, of which 14 inches are brought by the south-west monsoon across the Gháts. The 12 stations of the Madras Meteorological Department are at Bangalore, Bellary, Cochin, Coimbatore, Karnúl, Madura, Masulipatam, Negapatam, Salem, Sikandarábád, Trichinopoli, and Wellington. The whole coast of the Bay of Bengal is liable to disastrous cyclones, which not only wreck the shipping in the roads, but have repeatedly overwhelmed the low-lying ports.

The most prevalent diseases are fevers, diarrhœa, dysentery and other bowel complaints, cholera, and small-pox. It is invariably found that the cold season is most fatal to natives. As a rule, mortality begins to decline with the setting in of the hot, dry season, rises again with the moisture of the south-west monsoon, and reaches its maximum in the cold-weather months of November, December, and January. Registration of births and deaths has been in force throughout the Presidency since 1866. The famine caused a great repression of the normal fecundity of the people, but there is reason to suppose that the effects

of the famine in this respect have now ceased. The returns cannot be accepted as trustworthy, especially as regards births; but they show signs of improvement. In 1876, the total number of births registered was 325,531 males and 306,582 females—total, 632,113, or at the rate of 21·6 per thousand. In 1882, the total number of births registered was 751,104, or at the rate of 26·0 per thousand. The number of deaths registered in 1875 (when the pressure of famine began) was 641,260; and in 1882, 470,700. The general death-ratio in 1882, as nominally registered, was 16·2 per thousand. In towns, where registration is less imperfect, the birth-rate was 33·1 per thousand. Of the total number of deaths in 1882, 188,561 were assigned to fevers, 23,604 to cholera, 19,958 to bowel complaints, 20,159 to small-pox, 1487 to suicide, and 2373 to snake-bite, leaving 214,558 for all other causes. No deaths from cholera or snake-bite were returned in 1882 as having occurred among the European and Eurasian population, who numbered in all 32,734.

In 1882–83, the civil hospitals and dispensaries numbered 275, affording relief to 1,538,576 patients. Among the in-patients, the death-rate was 71·6 per thousand. The total income was £81,106, to which Native donations contributed £1782. There were 3 lunatic asylums—at Madras city, Vizagapatam, and Calicut—with a total of 617 inmates in 1882–83, of whom 116 were criminal lunatics. The death-rate in the same year was 10 per cent. The total expenditure was £7591.

Vaccination is now carried out as a branch of the sanitary department. In 1882, the total number of vaccinations was 649,485, of which 601,918, or 92·6 per cent., were successful. The greater portion of the sanitary expenditure is provided from local and municipal funds, from which source almost all the hospitals and dispensaries beyond the precincts of the city of Madras are provided and maintained, and their numbers yearly added to. The health of the British and Native troops is well cared for, and is satisfactory. The death-rate among the British troops averages 1 per cent.; the death-rate of the Native troops, 1·1 per cent.

The Botany and Zoology of Madras.—The wild and domestic animals of the Madras Presidency have been briefly described from their administrative aspects in an earlier section of this article; and some account has been given of the principal crops and agricultural products. The following paragraphs are intended to furnish a more comprehensive view of the Flora and Fauna of Southern India, and to take the place of local descriptions in the District articles. They are reproduced from the official papers, prepared for the Madras Government, by Deputy Surgeon-General Bidie, copies of which have been kindly forwarded for the use of this work.

The earliest treatise on the Flora of Southern India is the 'Hortus Malabaricus' of Van Rheede, a Dutch Governor of Malabar. That work gives the vernacular names, descriptions, and excellent figures of 794 plants, and was published at Amsterdam from 1686 to 1703 in 12 folio volumes. The culture of scientific botany in the south, however, began with Koënig, a Danish physician and pupil of Linnæus, who resided at Tranquebar in the latter end of the 18th century. Stimulated by his example, a number of others began to cultivate the science, amongst whom may be mentioned Buchanan-Hamilton, Heyne, Rottler, and Roxburgh. The last-named was the first to describe accurately and arrange in a systematic work the vegetable riches of the peninsula. His 'Coromandel Plants,' a splendid work, published by the Honourable East India Company from 1795 to 1819, consists of three folio volumes, containing 300 coloured plates. His 'Flora Indica,' which was left in manuscript at his death in 1815, was subsequently published in 1832, and for terseness and accuracy of description has never been surpassed. But the most voluminous and distinguished author on the botany of this part of India was Dr. Wight. The 'Prodromus Floræ Peninsulæ Indiæ Orientalis' by Wight and Arnott, containing descriptions of nearly 1400 species, appeared in 1834. This was followed by 'Illustrations of Indian Botany,' which contain 182 coloured plates, with a great amount of information on the natural orders, and were published in 2 quarto volumes from 1838 to 1850. This again was succeeded by the 'Icones Plantarum Indiæ Orientalis,' which extend to 6 quarto volumes, and give figures and descriptions of 2101 plants. He also produced the 'Spicilegium Neilgherrense,' containing coloured illustrations of the more striking Nílgiri plants, and much valuable information regarding the flora of that mountain range. Besides these, he published several minor works and numbers of botanical papers in various periodicals.

Subsequent to Wight, the chief contributors to the literature of South Indian Botany have been Sir Walter Elliot, Dr. Cleghorn, and Colonels Drury and Beddome. In 1859, Sir Walter Elliot published his 'Flora Andhrica,' a list with the botanical and vernacular names of the plants growing in the Northern Circars. Dr. Cleghorn's chief work is the 'Forests and Gardens of Southern India.' Colonel Drury compiled a 'Handbook of the Indian Flora,' in 3 volumes 8vo, and the 'Useful Plants of India.' Beddome's works consist of the 'Flora Sylvatica,' 2 volumes 4to; 'Ferns of Southern India,' 1 volume 4to; 'Ferns of British India,' 1 volume 4to; and 'Icones Plantarum,' 1 volume 4to. The labours of these distinguished pioneers having paved the way towards a complete knowledge of peninsular plants, the 'Flora of British India,' edited by Sir J. D. Hooker, now in course of publication, gives a lucid summary of all existing knowledge, establishes the genera

and species on a sound and philosophical basis, unravels the hitherto perplexing synonymy, and affords an admirable compact guide for the working botanist.

Climate of Southern India as affecting Vegetation.—The conditions which chiefly affect vegetation are temperature and moisture, the latter being the more active agent as regards the distribution of plants. Practically, the limits of the Madras Presidency may be said to lie between 8° and 20° north latitude, so that it is entirely within the tropical zone. The normal mean temperature at the equator is under 80° F., and scarcely diminishes up to the 10th degree of north latitude; but from 10° to 20° there is a reduction of about 2½° F. From March till the end of September, or during the summer months, the southern portion of the peninsula is very hot; and from October till February, the winter months, it is comparatively cool. Two periodical winds, viz. the south-west and north-east monsoons, chiefly influence the rainfall. The south-west monsoon begins on the Malabar or western coast about May, and ends about the autumnal equinox, and being a sea wind, is very rainy. The north-east monsoon chiefly affects the Coromandel coast, and sets in in October, but does not bring much moisture, and the rain stops long before the end of the monsoon.

The hot season in Southern India has much the same effect on vegetation as winter has in a temperate climate. Herbaceous plants wither and disappear, trees and shrubs drop their leaves, and in many cases the young foliage remains in the bud till quickened by rain. When the rain does come, the effect is almost magical. In less than 24 hours the scorched brown plain is carpeted with green, and the bare trees are quickly mantled with the young leaves, which sometimes, as in the tamarind, are of a golden green, and in the morning light glorious beyond description. At the same time animal life is stirred into activity. Sportive insects hover over newly-opened flowers; swarms of frogs render night hideous by their incessant croaking, and every ditch and pool teems with fish.

For the purposes of botanical description, the area of the peninsula under the Government of Madras may be divided into a Dry, a Moist, and a Very Moist Region. The dry region, with a rainfall under 30 inches, embraces some of the inland and coast *táluks* of Kistna District, the northern portion of Nellore, a large section of Karnúl, nearly the whole of Cuddapah, all Bellary and Anantápur, parts of Salem and Trichinopoli, most of Coimbatore, and the eastern portions of Madura and Tinnevelli. In the Districts included in this region, rain falls in both monsoons in occasional showers. The moist region, with a rainfall of over 30 inches, embraces, except in a dry tract between Bápatla and Rámapatam, the whole eastern coast from Ganjám in the north to near the southern extremity of Madura, as well as inland

Districts. It includes the whole of the Northern Circars, portions of Kistna District, Cuddapah and Karnúl, most of Nellore, Chengalpat, North and South Arcot, Tanjore and parts of Salem, the eastern slopes of the Nílgiris, Trichinopoli, and Madura. In the northern portions of this region, the summer monsoon rains are moderate, the maximum fall being in October. In the southern Districts, the summer monsoon rains are light, the maximum being also in October inland, and during November on the coast. The very moist region embraces the whole of the western coast from South Kánara to near Cape Comorin, as well as the western slopes of the Gháts. The rainfall below the Gháts varies from 110 to 130 inches, and on the range from 150 to 200 or more, and the rain falls from May to October, or during the south-west monsoon.

General Character of the Flora.—India may be regarded as a huge botanical garden, for it contains representatives of a very large number of genera which more properly belong to other parts of the world. Its flora is also remarkable for its affinities with the plants of surrounding countries, and for the absence of marked special features. Within the limits of the Madras Presidency there is, however, a great difference between the vegetation of the dry zone and the very moist region. The flora of the hill ranges differs from both. In the dry region, and throughout much of the moist region, the wooded area consists to a large extent of 'scrub jungle,' and the herbaceous flora is largely made up of plants belonging to the orders Capparideæ, Malvaceæ, Tiliaceæ, Leguminosæ, Euphorbiaceæ, Rubiaceæ, Ficoideæ, Amaranthaceæ, Compositæ, Cucurbitaceæ, Labiatæ, Convolvulaceæ, Acanthaceæ, Commelynaceæ, Gramineæ, and Cyperaceæ.

The very moist region of the west coast is characterized by lofty forest, containing teak and other useful timbers and various palms. In the shade of the forest, cardamoms, pepper, and moisture-loving ferns flourish; and Melastomads, etc., which are only seen at considerable elevations on the eastern side of the Gháts, grow at sea-level. Along the coast also, mangrove, Cycads, and Gnetum are common.

Dry Region.—As already indicated, the dry zone mainly occupies the centre of the Presidency, extending southwards from Bellary through Mysore and Coimbatore to Cape Comorin. Throughout the whole of it the scanty rainfall is very precarious, and during the hot season herbaceous vegetation is burned up, many trees are leafless, and the aspect of the country is dreary in the extreme. The silence of the sparse jungle is only broken by the discordant noise of the cicala, the *tuk-tuk* of the barbet (Xantholæma indica), the screech of the kite, or the melancholy whistle of the drongo-shrike. The characteristic shrubs of the Districts comprehended in this section are the Carissa Carandas, Calotropis gigantea, Opuntia Dillenii, Dichrostachys cinerea, Cassia

auriculata, Bauhinia racemosa, Celastrus paniculatus, Gymnosporia montana, Euphorbia antiquorum, E. neriifolia, E. tirucalli, Azima tetracantha, Capparis Roxburghii, C. horrida, Niebuhria linearis, Ixora parviflora, Randia dumetorum, Vitex Negundo, Grewia (*species*), Rhus mysorensis, Securinega Leucopyrus, Jatropha glauca.

The chief timber-trees of the dry region are Balanites Roxburghii, Zizyphus Jujuba, Wrightea tinctoria, Acacia arabica, A. latronum, A. planifrons, A. leucophlœa, A. Catechu, A. eburnea, Cassia Fistula, Pterocarpus santalinus in certain tracts, Albizzia amara, A. Lebbek, Tamarindus indica, Pongamia glabra, Morinda citrifolia, and Santalum album. A palm (Phœnix sylvestris) is very common in the northern and central parts of the dry region.

Teak is also found on some of the rocky hills, but it does not attain the dimensions, or the quality as regards timber, of teak trees growing in moister Districts. The other trees found on the low hills of the northern parts of the dry zone are Anogeissus latifolia, Terminalia tomentosa, T. belerica, Diospyros melanoxylon, D. montana, Dolichandrone falcata, Erythroxylon monogynum, Buchanania latifolia, Phyllanthus Emblica, Chloroxylon Swietenia, Wendlandia tinctoria, Boswellia serrata, Lagerstrœmia parviflora, Eriolæna Hookeriana, Pterocarpus Marsupium, Dalbergia latifolia, Careya arborea, Kydia calycina, Hardwickia binata, Elæodendron glaucum, Eugenia Jambolana, Schleichera trijuga, Soymida febrifuga, Chickrassia tabularis, Stephegyne parvifolia, Mimusops Elengi, Putranjiva Roxburghii, Ulmus integrifolia, and Dendrocalamus strictus. Under the trees at the higher elevations of hills in the north of the dry zone, there is a dense undergrowth of Strobilanthes.

In the southern Districts of the dry zone there is much scrub jungle, which consists largely of various species of Acacia, Dichrostachys cineria, Canthium parviflorum, Randia dumetorum, Erythroxylon monogynum, Albizzia amara, A. Lebbek, Melia Azadirachta, Alangium Lamarckii, Atalantia monophylla, Bassia latifolia, B. longifolia, Cordia Rothii, Cratæva religiosa, Pongamia glabra, and Ailanthus excelsa.

On the slopes of the hills up to a height of 3000 feet, there are extensive tracts of jungle of the male bamboo (Dedrocalamus strictus), and at higher elevations of Bambusa arundinacea. On the lower parts of the hills the characteristic trees are Boswellia serrata, Sterculia urens, S. villosa, Dalbergia paniculata, Anogeissus latifolia, Chickrassia tabularis, Chloroxylon Swietenia, Terminalia tomentosa, T. paniculata, T. Chebula, Hardwickia binata, Acacia Catechu, Albizzia amara, Premna tomentosa, Tectona grandis, Pterocarpus Marsupium, Grewia, Lebedieropsis orbicularis, Strychnos potatorum, Santalum album, Strychnos Nux-vomica, Gyrocarpus Jacquinii, Zizyphus glabrata, Sapindus emarginatus, Stephegyne parvifolia, Wrightea tinctoria, Albizzia odoratissima, Proso-

pis spicigera, and Eugenia Jambolana. At higher elevations there are evergreen forests containing Tetranthera laurifolia, Litsæa zeylanica, Cedrela Toona, Michelia Champaca, Mimusops Elengi, and the handsome palm Caryota urens. Coffee and tea are also cultivated on the higher parts of some of the hill ranges.

Moist Region.—The herbaceous plants and shrubs common in this region are very much the same as those of the dry zone, but in addition to the shrubs mentioned as pertaining to the latter, the following may be enumerated, viz. Hugonia mystax, Ochna squarrosa, Memeclyon (*species*), Ehretia (*species*), various Asclepiads, Webera asiatica, Scutia indica, Toddalia aculeata, Dodonœa viscosa, Celastrus senegalensis, Eugenia bracteata, Diospyros chloroxylon, Bauhinia racemosa, Acacia Farnesiana, Gmelina Asiatica, Jasminum (*species*), Capparis horrida, C. divaricata, Wendlandia Notoniana, Gardenia (*species*), Ventilago Maderaspatana, Salvadora persica, Zizyphus xylopyra, Z. Œnoplia, Hiptage Madablota, Celastrus (*species*), Hemicyclia sepiaria, Glycosmis pentaphylla, Helicteres Isora, Phœnix farinifera, etc.

Great changes have been made in some places along the coast by planting dry tracts of drifting sand with Casuarina, which grows very fast and is valuable for firewood. Not only do these plantations improve the aspect of the country by clothing the arid sands with luxuriant forest, but they also seem to have a beneficial effect on the neighbouring climate and cultivation. The most important sand-binding plants on the coast are, in the order of their value, Spinifex squarrosus, Ipomæa pes-capræ, Launæa pinnatifida, Tridax procumbens, Pupalia orbiculata, Canavalia obtusifolia, and a recently introduced Australian plant, Flaveria Australasica.

It is not very easy to draw any sharp line of demarcation between the forest trees of the dry and moist regions, and in most Districts the two floras run into each other. In the north, the most characteristic tree is *sál* (Shorea robusta), which does not extend south of the Godávari. Other notable trees in the north are Xylia dolabriformis, Heterophragma Roxburghii, Cordia Macleodii, Polyalthia cerasoides, Pithecolobium umbellatum, Albizzia Julibrissin, Oroxylum indicum, Balanites Roxburghii, Gmelina arborea, Antidesma Ghæsembilla, Ougeinia dalbergioides, Grewia excelsa, Lebidieropsis orbicularis, Protium caudatum, Chloroxylon Swietenia, Erythrina suberosa, Schleichera trijuga, Saccopetalum tomentosum, Soymida febrifuga, Chickrassia tabularis, Putranjiva Roxburghii.

Farther south in Madras we have instead of the *sál*, Shorea Tumbuggaia and S. Talura, and Acacia Sundra, Vitex pubescens, Hemigyrosa canescens, Albizzia Lebbek, Ailanthus (*species*), Terminalia Chebula, T. tomentosa, Anogeissus latifolia, Eugenia Jambolana, E. alternifolia, Cochlospermum Gossypium, Odina Wodier, Diospyros melanoxylon, D.

chloroxylon, Cassia Fistula, Hardwickia binata, Dalbergia paniculata, Erythrina (*species*), Bauhinia (*species*), Acacia latronum, Adina cordifolia, Stephegyne parvifolia, Strychnos potatorum, S. Nux-vomica, Sapindus emarginatus, Buchanania angustifolia, Melia Azadirachta, Ægle Marmelos, Thespesia populnea, Sterculia (*species*), Heritiera littoralis, Avicennia officinalis, Maba buxifolia, Mimusops indica, Givotia rottleriformis, Pterospermum suberifolium, Pterocarpus Marsupium, *species* of Ficus; and the palms Cocos nucifera, Borassus flabelliformis, and Areca Catechu are largely cultivated. Here and there throughout this tract there are low hills on which the characteristic trees are Eriolæna, *species* of Sterculia, Bombax, Boswellia serrata, Buchanania latifolia, Butea frondosa, Dalbergia (*species*), Careya arborea, Albizzia (*species*), Lagerstrœmia (*species*), Anogeissus latifolia, Tectona grandis, Gmelina arborea, Terminalia (*species*), Phyllanthus Emblica, Mallotus philippinensis, Ulmus integrifolia, Sponia orientalis, Bambusa arundinacea, Dendrocalamus strictus, and Caryota urens.

At elevations over 6000 feet the flora of the Madras Presidency becomes changed, and shows various affinities with the vegetation of temperate regions of the world. Amongst the herbaceous plants, we find Anemone, Ranunculus, Viola, Potentilla, Spergula arvensis, Anagallis arvensis, Pimpinella, Gentiana, Pedicularis, Plantago major, Lilium, Rumex, Pteris aquilina, Osmunda regalis, and Gleichenia dichotoma. Balsams are especially represented and luxuriant, and ferns and certain orchids are common. Two species of fern, viz. Lastrea scabrosa and L. ferruginea, are peculiar to Southern India. Of the shrubs, the most characteristic are Berberis, Rubus, Rosa, Cotoneaster, Gualtheria, Ligustrum, and Lobelia excelsa. Species of Strobilanthes, too, are exceedingly common. The most typical trees are Michelia, Gardenia, Ilex, Meliosma, Photinia, Eugenia, Viburnum, Vaccinium, Rhododendron, Symplocos, Salix, Cinnamomum, Tetranthera, Litsæa, and Glochidion. In the shade of the forest, the shrubs consist mostly of Strobilanthes, Rubiaceous shrubs, Sarcococca saligna, etc.

On the slopes of the hills, coffee and tea are largely cultivated; and on the plateau of the Nílgiris there are extensive Cinchona plantations, consisting chiefly of crown and red barks. The culture of the latter species is also carried on in Wainád, and to some extent in Coorg. Apples, peaches, pears, and strawberries thrive fairly on the eastern side of the Nílgiris, and walnuts fruit very well at Utakamand (Ootacamund). The Australian Acacias and numerous species of Eucalyptus have been introduced, and grow vigorously. Species of Cupressus, Araucaria, Cryptomeria, Frenela, and Pinus brought from the Himálayas, Japan, etc., are also thriving.

Very Moist Region.—This embraces the entire Malabar coast, which consists of a narrow hilly strip of land between the Western Gháts and

the sea, and of the western slopes of the Gháts. Owing to the perennial humidity of the climate, the flora is very luxuriant. The cocoa-nut and areca palms are largely cultivated, and Caryota urens and Corypha umbraculifera are common. The other palms in this region are Arenga Wightii and Bentinckia condapanna. The flora generally is very similar in its characters to that of Ceylon, and many species are identical The pepper vine and jack tree are largely cultivated, and so are plantains. A conifer (Podocarpus latifolia) grows on the hills, and one of the most conspicuous trees is Vateria indica, with its beautiful bright green foliage and large panicles of white flowers. Other characteristic plants are Garcinia Morella, G. Cambogia, G. indica, Alstonia scholaris, Cerbera odollam, Pandanus, Rhizophora, Ceriops, Bruguiera, Diospyros Embryopteris, Canarium strictum, Ailanthus malabarica, Oroxylum indicum, Macaranga, Connarus monocarpus, Gnetum (*species*), Cycas (*species*), Mussænda frondosa, Litsæa zeylanica, shrubby Solanaceæ, a number of species of Eugenia, Ixora coccinea, Scævola, Vitis lanata, Calophyllum Wightianum, C. tomentosum, Ultriculariæ, Osbeckia and other Melastomaceæ, Sphenoclea, and Acanthaceæ.

The maritime slopes of the Gháts running down the western coast are covered with dense forest, some of the trees towering to a height of 200 feet. The typical trees here are Calophyllum, Mesua, Dipterocarpus, Hopea, Vateria, Chickrassia, Canarium, Gomphandra, Euonymus, Harpullia, Ormosia, Acrocarpus (Red-cedar), Saprosma, Bassia, Myristica, Alseodaphne, Sarcoclinium, Ostodes, Artocarpus, Laportea, and Gironniera. The undergrowth consists largely of numerous species of Strobilanthes, and shrubs belonging to Rubiaceæ and Euphorbiaceæ. There are three reed bamboos, viz. Beesha, Oxytenanthera, and Teinostachyum. The tree fern Alsophila latebrosa is common, and the rarer A. crinita is also found. Epiphytic ferns, mosses, balsams, and orchids cover the trunks and limbs of many of the trees. Some of the orchids are of great beauty, and the genera most largely represented are Oberonia, Dendrobium, Eria, Cælogyne, Eulophia, Saccolabium, Ærides, and Habenaria. Cardamoms, Zingiber, Hedychium, Alpinia, and other members of the same family flourish in great perfection. The forests on these western slopes are evergreen, and viewed from a height the great variety in the colour of the foliage gives them quite a character and renders them remarkably beautiful.

Food Grains and Pulses.—The chief cereal in some parts of the dry region is *ragí* (Eleusine corocana), but rice is also cultivated wherever a sufficient water-supply is available. The pulses raised in this zone are gram, Dolichos biflorus, and a pea, *thovaray* (Cajanus indicus). In the northern parts of the moist region, *cholam* (Sorghum vulgare) is the chief dry grain crop. Throughout the whole of this zone, however, the staple food is rice, and a great number of varieties of it are cultivated.

Various millets, species of Panicum, are also produced in small quantities. The two pulses already mentioned are also cultivated here, and Bengal gram (Cicer arietinum) and green gram (Phaseolus Mungo). Other species of Phaseolus and Dolichos are also common. In the very moist region the chief cultivated food-grain is rice, and some of the pulses already mentioned.

Fauna of Southern India.—The peninsula of Southern India forms part of the zoological region known as the 'Oriental' or 'Indian.' The fauna of this region, more especially that of the purely Indian section of it, has numerous affinities with that of the Ethiopian or African region, but both have well-marked distinctive peculiarities. Amongst the mammals of Southern India, the only ones that can be regarded as cosmopolitan are rats and mice, and some bats of the family *Vespertilionidæ.* As might be expected, the number of birds occurring in Southern India, which are more or less common to all parts of the world, are more numerous. Some of these are hawks, owls, crows, swallows, pigeons, grouse, partridge, snipe, plover, king-fishers, herons, and rails.

MAMMALS.—The only handbook on the mammals of India is that of Dr. Jerdon, and its nomenclature will accordingly be followed in the following remarks:—

The mammalian fauna of Southern India is characterized by the possession of a peculiar lemur, the little *Loris.* The other genera found in Madras and characteristic of the oriental region are *Presbytis* and *Macacus*, species of monkeys; *Viverricula*, a civet cat; *Paradoxurus*, the toddy or tree cat; *Cyon*, the wild dog; *Platacanthomys*, a spiny-mouse; *Cervulus*, a muntjac; *Portax*, the nilgai; *Tetraceros*, the four-horned antelope; *Antilope*, the true Indian antelope; and a species of *Elephas*, the Indian elephant.

Quadrumana.—South India is rich in quadrumana. It possesses three species of *Langur*, viz. the Madras, the Malabar, and the Nílgiri. The most widely-distributed and best-known monkey is *Macacus radiatus*, the species commonly led about for exhibition, on account of its tricks and agility. The curious little *Loris gracilis* is very common in the eastern forests of the peninsula.

Cheiroptera.—The family of bats is represented by various genera, and the best-known species is *Pteropus medius*, the flying-fox.

Insectivora.—A very common shrew is that improperly termed the musk-rat, viz. *Sorex cærulescens*, which is often found in houses, and is useful, as it destroys cockroaches and other insects. A small hedgehog, *Erinaceus micropus*, is rather common in some of the western Districts; and a species of *Tupaia*, a Malayan genus, exists in the Eastern Gháts.

Carnivora.—One of the most common animals of this group is the

bear, *Ursus labiatus;* and although it feeds chiefly on insects and seeds, yet, when enraged, it is one of the most dangerous of all the denizens of the jungle to human life. A somewhat uncommon animal is the Indian badger, *Mellivora indica;* but Otters and a Marten abound in certain parts of the country. The most notable beasts of prey are the tiger, the leopard, and cheetah. It seems probable also that the lion at one time existed, as figures of it are common on Buddhist sculptures executed about the dawn of the Christian era. The tiger, *Felis tigris*, abounds throughout the whole of the peninsula, but is being gradually pushed back by the extension of cultivation. Where game abounds, the tiger does not usually destroy cattle; and it is only in exceptional cases that it becomes a man-eater and the terror of a District. The average length of a tiger, from the nose to the tip of the tail, is from 9 to 9½ feet; but some are longer. The leopard, *Felis pardus*, is more common than the tiger, and chiefly preys on game, wild pig, and monkeys. It is not very destructive to human life, and its victims are mostly old women and children. Its impudence is unbounded, as it often enters villages and even houses and tents, to carry off dogs or goats. A curious variety of the species is the black leopard,—a beautiful but vicious beast. A distinct species, much less common, is the cheetah or hunting leopard, *Felis jubata.* Several other cats also exist, such as the leopard cat, the large tiger cat, the lesser leopard cat, rusty spotted cat, and the common jungle cat. The Civets are represented by the ubiquitous lesser civet cat, the Malabar civet cat, the toddy cat, and the Ceylon brown *Paradoxurus* (from Kotágiri); and the Ichneumons by the common mungoose and several hill species. Out of seven species of Mungoose in India, five are peculiar to Madras. The genus *Paradoxurus* is characteristically Asiatic, but *Herpestes* is common to India and Africa. The other more notable carnivora are the hyæna, *Hyæna striata;* and the members of the dog tribe, viz. *Cyon rutilans*, the wild dog; *Canis pallipes*, the Indian wolf; *Canis aureus*, the universal jackal; and *Vulpes bengalensis*, the Indian fox.

Rodentia.—The animals belonging to this order in Southern India are squirrels, rats, hares, and porcupines. *Sciuridæ.* The best known of these is the common squirrel, *Sciurus palmarum.* The largest is the Malabar squirrel, *Sciurus malabaricus.* One of the most remarkable of the group is the flying-squirrel, *Pteromys petaurista;* it lives in dense forests, and by means of the parachute-like expansions of skin between its fore and hind legs, is able to take prodigious leaps from tree to tree. There is also another flying-squirrel, *Sciuropterus*, in Travancore. One of the prettiest of the *Muridæ* is the jerboa-rat, *Gerbillus indicus*, which lives on uncultivated sandy plains, and sits up on its hind legs like a kangaroo. The largest of the group is the pig-like, vagabond bandicoot, *Mus bandicota.* It swarms in towns and villages, and seems to take a

special delight in wanton mischief. The European black and brown rats are also common. The other more remarkable species are the mole rat and the tree rats. Species of *Golunda*, *Platacanthomys*, and *Leggada* are found in Madras; and *Platacanthomys*, which has spines on its back, is the only known species of its genus.

The largest of the rodents is the porcupine, *Hystrix leucura*, which inhabits hilly districts, and is a great enemy to some cultivated plants, such as the potato. There is one hare, the common *Lepus nigricollis*.

Edentata.—This order is represented by one species, *Manis pentadactyla*, the Indian scaly ant-eater. It is widely diffused, living amongst low rocky hills, but is not common. Owing to its powerful claws, which it uses in scraping and tunnelling, it is very difficult to keep in confinement. It is also difficult to feed, as it is nocturnal in its habits, and will only eat ants.

The *Proboscidea* are represented by the elephant, *Elephas indicus*, which inhabits the mountain forests of Coorg, Malabar, and Travancore. It differs from the African elephant in having relatively smaller ears, 19 instead of 21 pairs of ribs, and 33 tail bones instead of 26. The transverse spaces of the molar teeth are in the form of narrow bands with nearly parallel finely-folded edges; while in the African elephant, the same spaces are broad and lozenge-shaped, and fewer in number. The elephant is gregarious and very destructive to crops and plantations. As a rule, it is timorous and avoids men; but at times, a single male becomes a 'rogue,' and attacks every living thing that comes in its way. A few years ago, this noble animal was likely to be exterminated by shooting and capture in pits; but, under existing protective rules, it is again multiplying, but can never do so to an inconvenient degree, as plantations of various kinds have greatly reduced the extent of the primeval forests, in which the elephant used to breed and roam unmolested.

The *Ungulata* are represented in Southern India by the jungle-pig or wild boar, *Sus indicus*, which is common on the plains and also on hills at all elevations; and by numerous ruminants—deer, antelopes, wild goats, and wild cattle. The true deer with solid deciduous horns found in the peninsula are the *sámbhar*, *Rusa aristotelis;* the spotted deer, *Axis maculatus;* and the barking deer, *Cervulus aureus*. The *sámbhar* is a magnificent animal, and its pursuit is a favourite sport wherever it is found. It abounds both on the plains and the hills, but has been gradually driven away from some of its old haunts by shooting and extended cultivation. The most remarkable, perhaps, of the deer family of Southern India is the mouse-deer, *Memimna indica*, which is generally under a foot in height and but 5 or 6 lbs. in weight. It lives in hill forests up to 2000 feet, and is mostly found in rocky places. It belongs to

the musk-deer group, and like the musk-deer has no horns, but the male is furnished with canines.

The antelopes, together with the goats and cattle, belong to the family *Cavicornia*, the members of which have permanent horns, consisting of a bony core and a horny sheath. The antelope sub-family embraces some of the most graceful of animals; and two Indian species, the *nilgai* and four-horned antelope, differ from any of the African forms. The members of the group found in Southern India are the large *nilgai*, *Portax pictus;* the Indian antelope, *Antilope cervicapra;* and the four-horned antelope, *Tetraceros quadricornis.* No capricorns or mountain antelopes extend to the peninsula; but we have the handsome *Hemitragus hylocrius*, the Nílgiri wild goat or 'ibex' of sportsmen.

Of wild cattle we have but one species, *Gavæus gaurus*, the *gaur* or 'bison' of sportsmen. It abounds in the dense forests of the Western Gháts, the Palnís and Anamalais, and is also found in Coorg, Wainád, the Shevaroys, the hills about Vellore, the Bába Budan hills, and north of the Kistna along the Eastern Gháts to Cuttack. The bull is larger than the cow, and has a hump. The *gaur* is gregarious and generally timid; but sometimes a solitary bull becomes dangerous, and a wounded bison will frequently charge.

Birds.—In referring to the avi-fauna of Southern India, it will be impossible to do more than glance at its leading features, as it embraces at least 380 species. Jerdon's 'Birds of India' is the only complete handbook on the subject, but a great deal of information is also scattered through the pages of 'Stray Feathers,' a periodical conducted by Mr. Hume, late of the Bengal Civil Service.

Southern India, as regards its birds, possesses little or no zoological affinity with neighbouring regions. A large number of the genera represented consists of species which are either confined to, or very prevalent in, the oriental region. The most striking families are the gallinaceous birds, such as the peacock and jungle-fowl, splendid pigeons, the parrots, embracing parrakeets and a lorikeet, the hornbills, numbers of cuckoos, woodpeckers, and barbets, the bee-eaters, the sun-birds, the *maináís*, the kingcrows, and babblers.

Raptores or Birds of Prey.—To this group belong vultures, eagles, falcons, hawks, buzzards, harriers, and kites, the diurnal rapacious birds, and the various owls, the nocturnal birds of prey. Of the former there are about 40, and of the latter 15 species in Southern India. The vultures are all foul-feeding scavengers; and of the four species, the black vulture, *Otogyps calvus*, and white scavenger vulture, *Neophron percnopterus*, are well known. There are three species of the genus *Aquila*, besides other members of the *Aquilinæ*, including the serpent eagle, *Circaetus gallicus*, and the osprey. Four falcons proper are

common, and three were species used for hawking when that noble sport was pursued. Kestrels and hawks abound, and the *Haliastur Indus*, the Brahmini kite, and *Milvus govinda* are ubiquitous. Of owls we have horned and hornless; of the family the best known perhaps are the little owlet, *Athene Brama;* the screech owl, *Strix javanica;* and the brown fish owl, *Ketupa ceylonensis*.

Passeres or Perching Birds.—The nocturnal fissirostral birds in Southern India embrace five species of *Caprimulgus*, the night-jar or goat-sucker. The diurnal fissirostres are represented by swallows, trogons, bee-eaters, rollers, kingfishers, and hornbills. Swallows and swifts are rather numerous, and one of the most remarkable is the *Collocalia unicolor*, the Indian edible-nest swiftlet, which frequents the West Coast and Nílgiris. In all, some 14 species of Hirundinidæ belong to Southern India. Of the trogons, remarkable for their beauty, only one sober-coloured species, the Malabar trogon, is known in the south. The bee-eaters, also pretty birds, are more largely represented, there being three species of *Merops* and one of *Nyctiornis*. There is but one roller, *Coracias indica*, popularly known as the blue jay. Seven species of kingfisher are known to inhabit the south, and the birds are common. Of the curious hornbills there are four species, but as they are retiring forest birds, they are, although common, rarely seen.

Scansores.—This tribe contains some birds of great beauty, viz. parrots, woodpeckers, barbets, and cuckoos, all of which are represented in Southern India. One familiar bird of the group is the rose-ringed Parrakeet, *Palæornis torquatus*, a favourite domestic pet on account of the facility with which it can be taught to imitate certain words. Another well-known bird is a barbet, *Xantholæma indica*, called the 'coppersmith' on account of the metallic-like *tuk-tuk-tuk* which it utters all day long, especially in the hot weather. Of the cuckoo family we have the *koel*, *Eudynamys orientalis;* the crow pheasant, *Centropus rufipennis;* and pied-crested cuckoo, *Coccystes melanoleucos*.

Tenuirostres.—Of tenuirostral birds, Madras contains some beautiful examples, such as the brilliant little honey-suckers, nut-hatches, and the hoopoe.

Dentirostres.—This tribe is represented by the well-known shrikes, fly-catchers, thrushes, and warblers. Of the shrikes, one of the most common is the bold kingcrow, *Dicrurus macrocercus*. One of the most beautiful birds in India is the Paradise fly-catcher, *Tchitrea paradisi.* Another handsome bird is the whistling thrush of Malabar, the notes of which resemble the whistling of a boy who always seems to break down in the tune. Two black birds inhabit the south, and the Nílgiri one, *Merula simillima*, has quite as sweet a song as the European species. Other well-known dentirostral birds are the babblers or 'Seven sisters,' *Malacocircus griseus;* bulbuls, species of *Hypsipetes* and *Pycnon-*

otus, the orioles of golden plumage, and the fairy blue bird, *Irena puella*. Then come the warblers, embracing *Saxicolinæ*, stone chats; *Ruticillinæ*, redstarts and bush chats; grass-warblers, wren-warblers, including the skilful tailor-bird, *Orthotomus sutorius*, tree-warblers, and *Motacillinæ*, wagtails and pipits. To these follow tits and accentors.

Conirostres.—This tribe includes a host of familiar bird forms, such as the crows, *mainás*, and starlings, sparrows, amadavads, and larks. Of crows, the two best known species in the south are *Corvus splendens*, the common crow, and *Corvus culminatus*, the Indian corby. A remarkable bird belonging to this species is *Ploceus baya*, the weaver-bird, whose marvellous nest is the admiration of every one. The common *mainá*, *Acridotheres tristis*, and the hill *mainá*, *Eulabes reliogosa*, are also familiar objects. The sparrow, identical with that of Europe, also claims kinship with this large family, and so do the larks. The larks that sing best in confinement are *Mirafra cantillans*, a bush-lark abundant in the Karnatik, and the large-crested lark, *Galerida cristata*.

We now come to the *Columbidæ* or pigeons. Of tree pigeons the best known is the green pigeon, *Crocopus chlorigaster*, and the Imperial pigeon, *Carpophaga insignis*. Of ordinary pigeons and doves, the most common are the blue-rock pigeon, *Columba intermedia*, various doves belonging to the genus *Turtur*, and the ground dove *Chalcophaps indicus*.

Gallinæ vel *Rasores or Game Birds.*—Asia is specially rich in gallinaceous birds, possessing the most typical groups, and the largest variety of forms of any part of the world. The peninsular Rasores are divided by Jerdon into 4 families, viz. the *Pteroclidæ* or sand-grouse, *Phasianidæ* or pheasants, *Tetraonidæ* or grouse, and *Tinamidæ*. The true pheasants are all confined to Northern India. Of the sand-grouse, or rock pigeons as they are called by sportsmen, there are but two varieties found in the south, both of which belong to the genus *Pterocles*. The *Phasianidæ* embrace the following southern birds:—Pea-fowl, jungle-fowl, and spur-fowl. *Pavo cristatus* is a royal bird, and found generally in wooded districts. The red jungle-fowl of Bengal comes south to near the banks of the Godávari, but is a poor bird compared with the southern jungle-fowl, *Gallus Sonneratii*. Two species of *Galloperdix*, spur-fowl, are common. There are no true grouse in India, the *Tetraonidæ* being represented by partridges and quails. The painted partridge is rarely seen, but the grey partridge, *Ortygornis*, is widely dispersed. Of quail, including according to Jerdon both the true quails and the hemipodiine quails, there are eight species belonging to four genera.

Grallatores.—This order contains the bustards, plovers, snipe, rails, and herons. The bustard, *Eupodotis Edwardsii*, has now become scarce, but the lesser floriken, another famous game bird, is still common in certain Districts. Of plovers proper there are six species, including

the couriers, the double-banded plover confined to certain parts of Nellore and Cuddapah, and the golden plover. Two lapwings are very common, and we have a turn-stone and crab-plover. The sarus crane is an occasional visitor, and we have the common and demoiselle cranes. The woodcock is an annual visitor to some of our hill ranges, and the woodsnipe is not uncommon. The common jack and painted snipes are well known and common, and so are stints, sand-pipers, and green-shanks. A water-hen and rail abound. There are four storks, the most remarkable of which is the adjutant, *Leptoptilos argalus*, rare in the south, but common in Calcutta, where it is protected as a scavenger. There are various herons and egrets, including the paddy-bird, *Ardeola leucoptera*. The bittern of Europe, *Botaurus stellaris*, was lately found near Adoni, and there are various species of ibis.

Natatores.—To this family belong ducks, flamingoes, geese, whistling teal, grebes, gulls, terns, tropic-bird, pelican, cormorants, and the darter, all of which are represented and most of them familiar birds.

Reptiles.—Of the lizards of the peninsula, the genera most characteristic of the oriental region are *Eublepharis* and *Draco*. Of snakes, the genera *Cynophis* and *Passerita* are peculiar to Southern India and Ceylon, while the genera *Naja*, *Bungarus*, *Simotes*, *Trimeresurus*, and *Lycodon* are all peculiarly oriental. But the most notable family is the *Uropeltidæ*, rough-tailed earth snakes, the members of which are confined to Southern India and Ceylon.

Turtles, Lizards, etc.—The Chelonian reptiles are fairly represented in the peninsula. The most notable of the land tortoises is *Testudo elegans*, and the most common of the fresh-water species is the fetid *Melanochelys trijuga*. *Emyda vitatta*, a terrapin, which is eaten, abounds in tanks and wells, and is supposed to purify the water. The best known turtle is *Chelonia virgata*, the green or edible turtle, for which the loggerhead, *Caouna olivacea*, is sometimes substituted. The hawk's-bill, *Caretta squamata*, which furnishes tortoise-shell, also frequents the coast.

Of reptiles, the most formidable are the aquatic *Crocodilia*. Three species of them are found in Southern India, and all of them attain a large size, and are very destructive to man and beast. On the eastern side of the peninsula they are much less common than in former years, but they still swarm in the rivers and back-waters of Malabar.

Of lizards, perhaps the most remarkable is the Monitor, *Varanus dracæna*, which attains a length of four feet, and is eaten by natives. The *Lacertidæ*, ground lizards, have representatives of two genera, viz. *Cabrita* and *Ophiops*. The Geckos, the pretty little lizards, with viscous or sticky lobes on the toes for adhesion to walls, some of which are common in dwelling-houses, have representatives of at least four genera, containing over 24 species, and all of them, except *Eublepharis*, can run

up smooth perpendicular surfaces. Of the genus *Gymnodactylus*, there are 17 species. One of the most curious of lizards is *Draco Dussumieri*, which is furnished with a parachute sort of expansion of skin on each side of the body, giving it the appearance of the fabulous dragon. This parachute apparatus consists in the elongation of many of the posterior ribs, which pass into and support the expansion of the skin on each side of the body. It is by the aid of this arrangement that the animal executes its wonderful flights from tree to tree. The most common lizards are those known under the popular term of blood-suckers. Most of these belong to the genus *Calotes*. A true chameleon also exists, but is not very common.

Snakes.—Although snakes are common and the number of species considerable, fortunately the larger proportion of them are non-poisonous. Out of about 70 species of land snakes belonging to Southern India, only about 13 are poisonous, and some of these are small and not very dangerous, and others comparatively rare. Of the sea snakes, some 40 are known to frequent the Bay of Bengal; and it may be said in a word that the whole of this family, the *Hydrophidæ*, are very venomous. Of poisonous colubrine snakes, the most notable are the Cobra, the *karait* (*Bungarus cæruleus*), and *Bungarus fasciatus*. There are, further, three poisonous species of *Callophis*, all of which live in hill forests and are not common. The carpet snake, *Lycodon aulicus*, which resembles the *karait*, is harmless, but it would be awkward to mistake a *karait* for a *Lycodon*.

Of the vipers, the most dangerous is the Russell's snake, *Daboia elegans*, the *tik polonga* of Ceylon. It is a very sluggish snake, and hisses loudly like a goose when enraged. The other viperine snakes are the small *Echis carinata*, a common but not so deadly snake, in which the scales are modified to serve as sound-producing organs; and hill species of *Trimeresurus*, *Halys*, and *Hypnale*. It will thus be seen that poisonous species are not numerous, and that the native and popular ideas on this head are very erroneous. Of the curious subterranean blind snakes, *Typhlopidæ*, only one species is known in Southern India, *Onycocephalus acutus*. The whole of the Indian *Uropeltidæ*, rough-tailed earth snakes, are, as already stated, peculiar to Southern India and Ceylon; and of *Rhinophis*, Madras has two species; of *Silybura*, seven species; of *Plectrurus*, six species; and of *Melanophidium*, three. Of the *Calamariidæ*, only one species belongs to the peninsula, but of the Filleted ground snakes, *Oligodontidæ*, there are eight species belonging to *Oligodon* and *Simotes*. Of the active *Colubridæ*, 12 species are South Indian, and belong to the genera *Ablabes*, *Odontomus*, *Cynophis*, *Ptyas*, *Tropidonotus*, and *Zamenis*. The *Ptyas* or *Dahman* is the 'female cobra' of the Tamil people, but it need hardly be said that it is harmless and in no way related to the cobra. Of river snakes there are two species, *Cerberus* and *Hypsirhina*. Of common

tree snakes we have two species, a *Dendrophis* and *Chrysopelea;* and of long-nosed tree snakes, three. The most common of the latter is the pretty and well-known, long-nosed, green *Passerita mycterizans.* There are also two broad-headed tree snakes of the genus *Dipsas.* There is a family (*Lycodontidæ*), furnished with a fang-like tooth, but the four species belonging to *Lycodon* are quite harmless.

AMPHIBIANS.—There are two apodous amphibians of the family *Cæciliidæ*, viz. *Cæcilia* and *Epicrium*, which burrow in the ground like earthworms; also true frogs, tree frogs, and many toads. Of the frogs, *Ranidæ*, the chief genus is *Rana*, but *Pyxicephalus* and others are represented. The bull-frog, *Rana tigrina*, is very common; and one of the most extraordinary species is *Cacopus globulosus*, which looks like a ball with head and limbs projecting. *Diplopelma ornatum* is the small frog which appears in great numbers after rain. The pretty tree frogs belonging to the *Discodactyles* are very numerous and mostly pertain to the following genera:—*Polypedates*, *Callula*, *Hylorana*, *Rhacophorus*, and *Ixalus.* To the last-named genus belongs the curious tinkling or coppersmith frog of the Nílgiri plateau. Toads of the genus *Bufo* are very abundant, and the common species is *B. melanostictus.*

FISHES.—There are strong affinities between the African and Indian fish faunas, and the Indian region also shows marked Malayan relationships in some of its forms. The only complete work on the subject is Day's 'Fishes of India,' but its price puts it out of the reach of ordinary students. A great deal of valuable information regarding the geographical distribution of fishes, etc., will also be found in Gunther's 'Study of Fishes.'

In noticing the Ichthyology of the Presidency, it will be convenient to refer to the fishes under three heads, viz. fresh-water fishes, brackish-water fishes, and sea fishes.

Fresh-water Fishes.—The true fresh-water fishes of the world belong to 39 groups or families, containing 2269 species; and of these 9 groups with about 115 species are represented in Southern India. The following is a list of the fresh-water fishes of this section of the Indian zoological region:—(1) *Percidæ*—Ambassis, 3. (2) *Nandidæ*—Nandus, 2. (3) *Labyrinthici*, 3—Anabas, 1; Polyacanthus, 1; Trichogaster, 1. (4) *Ophiocephalidæ*—Ophiocephalus, 7. (5) *Mastacembelidæ*—Mastacembelus, 2. (6) *Chromides*—Etroplus, 2. (7) *Siluridæ*—Silurus, 2; Pseudeutropius, 2; Macrones, 7; other genera, 4. (8) *Cyprinodontidæ*—Haplochilus, 2. (9) *Cyprinidæ*—Cirrhina, 2; Labeo, 8; Barbus, 26; Rasbora, 2; Nuria, 2; Amblypharyngodon, 3; Danio, 3; Barilius, 5; Osteobrama, 3; Chela, 5; Nemachilus, 9; Cobitis, 1; other genera, 7.

There are thus, roughly speaking, about 115 species of fresh-water fish in Southern India belonging to typical families, exclusive of some

belonging to hill ranges, and to families more properly marine, such as *Gobius*, *Belone*, *Megalops*, and *Murænidæ*. The groups most strongly represented are, it will be observed, *Cyprinoids* and *Siluroids*, which are therefore characteristic of this region.

Brackish-water Fishes.—Of the more notable of these, 5 belong to the *Percidæ*, viz. *Lates*, *Lutianus*, *Ambassis*, *Therapon*, and *Sciæna*. There are 1 *Polynemus*, 5 Mullets (*Mugil*), 4 *Clupeas*, 1 *Chanos*, and 1 *Rhynchobdella*. Mullets and herrings therefore preponderate. At the same time it must be stated that it is somewhat difficult to distinguish brackish-water fish, as some of them at times live entirely in the sea, while others are occasionally found in fresh water.

Sea Fishes.—These are very numerous, and only representatives of the chief families can be referred to. *Berycidæ; Percidæ* represented by Lates, Serranus, Genyoroge, Mesoprion, etc.; *Pristipomatidæ* represented by Therapon, Pristipoma, Diagramma, Gerres, Scolopsis, Synagris, etc.; *Mullidæ; Sparidæ* represented by Pagrus, Chrysophrys, etc.; *Squamipinnes* represented by Chætodon, Heniochus, Holacanthus, Scatophagus, etc.; *Cirrhitidæ; Triglidæ* represented by Pterois, Apistus, Minous, Platycephalus, etc.; *Trachinidæ* represented by Uranoscopus, Sillago, etc.; *Sciænidæ* represented by Sciæna, Corvina, Otolithus, etc.; *Polynemidæ; Scombridæ* represented by Scomber, Thynnus, Cybium, Stromateus, Coryphæna, etc.; *Carangidæ* represented by Caranx, Chorinemus, Trachynotus, Equula, etc.; *Xiphiidæ* represented by Histiophorus; *Gobiidæ; Teuthididæ; Pomacentridæ; Labridæ* represented by Cossyphus, Julis, etc.; *Pleuronectidæ* represented by Pseudorhombus, Synaptura, Cynoglossus, etc.; *Siluridæ* represented by Bagrus, Arius, etc.; *Scopelidæ* represented by Saurus and Saurida; *Scombresocidæ* represented by Belone, Hemiramphus, etc.; *Clupeiidæ* represented by Clupea, Pellona, Elops, etc.; *Syngnathidæ* represented by Syngnathus, Hippocampus; *Sclerodermi* represented by Triacanthus, Balistes, Monacanthus, and Ostracion; *Gymnodontes* represented by Tetradon, Diodon, etc.; *Carchariidæ* represented by Carcharias, Galeocerdo, Zygæna; *Scylliidæ* represented by Stegostoma, etc.; *Pristidæ* represented by Pristis; *Rhinobatidæ* represented by Rhynchobatus, Rhinobatus; *Torpedinidæ* represented by Narcine; *Rajidæ* represented by Platyrhina; *Trygonidæ* represented by Trygon; *Myliobatidæ* represented by Myliobatis, Rhinoptera, Ceratoptera, etc.

As regards edible species, the native population, as a rule, consume nearly everything from sharks to perches, with the exception of some of the Lophobranchii and Plectognathi. The favourite sea fishes at European tables in Madras are—*Seer* = Cybium guttatum, C. commersonii; Whiting = Sillago domina, S. sihama; Pomfret = Stromateus atous, S. niger; Sole = Species of Liachirus, Synaptura, Æsopia, Plagusia, and Cynoglossus; Mullet = Mugil 3 species also found in brackish waters.

MOLLUSCA.—Our knowledge of the South Indian mollusca is not very extensive, there being no special manual on the subject to which the student can be referred. On the Coromandel coast, the surf is generally too heavy to admit of the existence of shell-fish, for it pounds the delicate species to pieces. At Tuticorin the pearl oyster (*Meleagrina margaritifera*) has been fished for from time immemorial, and so has the sacred *sánkh* (*Turbinella pyrum*). The land snail fauna of Southern India is represented by numerous species of *Helices*, and the prevalence of *Bulimulus* and *Cyclophorus*. In the fresh-waters the mollusca are represented by snails of many genera, pulmonate and gill-bearing. Also by bi-valves of the genera *Unio*, *Corbicula*, etc.

The *Cephalopoda*, represented by the cuttle-fishes, embrace but few species, and the same may be said of the *Pteropods* which frequent the ocean. Two species of *Ianthina*, an oceanic snail, are known. Of the *Gasteropods*, consisting of sea and land snails, whelks, and limpets, there are numerous species. The order *Prosobranchiata*, including Siphonostomata or carnivorous gasteropods and Holostomata or sea snails, contains various South Indian species. The section Siphonostomata contains such shells as Strombus, Murex, Conus, Oliva, Cypræa, etc., and the Holostomata section, Natica, Cerithium, Melania, Paludina, Turbo, etc.

Of the order *Ophistobranchiata* or sea-slugs, we have some six or seven species belonging to Tornotella, Bulla, and Dolabella. In the order *Pulmonifera*, which embraces all the land shells and other air-breathing molluscs, there are numerous species belonging to Helix, Bulimus, Cyclotus, Pterocyclos, Cyclophorus, Vitrina, Streptaxis, Achatina, Cyathopoma, Jerdonia, etc. Helix ampulla and Cyclophorus Nilagiricus are rare shells, and only found on the western slopes of the Nílgiris. The bi-valve shells, constituting the *Conchifera*, contain oysters, scallops, mussels, and cockles. The *Asiphonida* group of these embraces Ostrea, Avicula, Mytilus, Unio, etc.; and *Siphonida* includes Cardium, Tridacna, Cytherea, Circe, Tellina, Solen, Pholas, Teredo, etc.

With reference to the use of the words *Pulmonata* and *Pulmonifera*, the following facts should be borne in mind:—

Animals belonging to two totally different morphological types are included under the term 'land-snails,' namely, the true *Pulmonata* (in which the sexes are united in the same individual, and the mouth of the shell, when this is present, is never defended by an *operculum*); and the Cyclostomacea, in which the sexes are in distinct individuals, and there is always an *operculum* to the shell. The latter are aquatic snails which have left the water, acquired lungs, lost their gills, and become completely habituated to a life on land. They are Pulmonate in a physiological sense only. Among river snails and pond snails also, two types are included, true *Pulmonata* and gill-breathing aquatic

snails, some of which latter, as, for instance, the globular *Amphulariæ* of Indian tanks and marshes, are amphibious, living sometimes on land, sometimes in water, breathing at one time by means of lungs, at another through gills. These are, in fact, intermediate between gill-bearing aquatic snails and operculated land snails with lungs but without gills. In all probability they disclose one of the steps by which the latter have been evolved from the former.

INSECTS.—There is no handbook on Indian insects, and descriptions of them are only to be found in incidental notices in general works and periodicals. A manual on the Butterflies by Marshall and de Niceville is in course of publication, which, when completed, will be of great assistance to those desirous of prosecuting this branch of natural history.

Coleoptera.—The most characteristic families of Indian beetles are the *Cicindelidæ* or tiger-beetles, the *Carabidæ* or ground-beetles, the *Scarabæidæ* including *Lucanidæ* or stag-beetles, the *Longicornia*, and the *Buprestidæ*. Of the carnivorous tiger-beetles, there are several species peculiar to Southern India; the white-spotted ground-beetle, *Anthia 6-guttata*, is found below trees everywhere. Various species of large sombre-coloured *Scarabæus* beetles make themselves disagreeable by flying on the table at night, and the Atlas beetle, a *Dynastid*, is at times seen. Magnificent specimens of stag-beetles are not uncommon, more especially in the western parts of the country. The species of Longicorns are numerous, and one, the notorious coffee-borer (*Xylotrechus quadrupes*), seemed likely to entirely put an end to coffee culture in Madras, until it was pointed out by Dr. Bidie that the insect did not thrive in coffee cultivated under shade. The most splendid of all the *Buprestidæ* are found in India, and the golden and green wing covers of some species are used for ornamenting dresses and embroidery. *Elateridæ* are also represented by some fine species.

Orthoptera.—Troublesome members of this sub-order are the cockroaches, species of *Periplaneta* and *Blatta*. The carnivorous *Mantidæ* or leaf-insects are very common, and some of them present a most marvellous resemblance to leaves. Not less wonderful but less common are the vegetarian *Phasmidæ*, the stick-insects or spectres, which simulate leafless twigs or bits of stick. Grasshoppers are very common, and in certain seasons the locust, an *Acridium* (*Œdipoda*), appears in vast hosts and causes great damage to crops. The noisy crickets, and the mole-cricket (*Gryllotalpa*), are widely distributed. One remarkable orthopterous insect of Southern India is *Schizodactylus monstrosus*. Splendid specimens of the dragon flies, *Libellulidæ*, may be seen hovering over water, but the best known insects of this order are the destructive *Termites* or white ants.

Hymenoptera.—Of this sub-order, perhaps the most familiar

members are the mason-wasp and carpenter-bee. The former (*Pelopæus coromandelicus*) at the beginning of the hot weather becomes busy in houses building up cells of clay, in which it places its ova and caterpillars, narcotized by being stung, on which the young wasps may feed. The carpenter-bee, a species of *Xylocopa*, is very destructive to timber by excavating a tunnel in which to deposit its eggs. The honey bees of Southern India belong to four species and three varieties. The most common species are *Apis indica* and *A. floralis*, and in some districts, *A. nigrocincta*, all small bees. The minute mosquito-bee is said to be a variety of *A. nigrocincta*. The large and irascible rock-bee is *A. dorsata* or one of its two varieties *testacea* and *zonata*, the stings of which often prove fatal to animals, and sometimes to men. Of stinging ants (*Myrmicites*), six species of *Atta* are found, one of which (*Atta minuta*) is common in the Karnátik. The other South Indian species belong to *Ocodoma*, *Eciton*, and *Myrmica*, most of which are widely distributed. The tribe *Ponerites* is represented by three genera, —*Odontomachus*, *Harpegnathos*, and *Ponera*, embracing eight species. Of the *Formicites* or true ants, there are at least twenty species belonging to the genus *Formica*.

Lepidoptera.—This section of the insect fauna is very copious, embracing a large number of species. Taking the specimens of an industrious collector as indicative of the relative numbers of the several families, the following may be adduced. The *Danaidæ* are widely distributed and common, and embrace a fair number of species. *Satyridæ* and *Elymniidæ* are less common, and the *Morphidæ* are not represented. *Nymphalidæ* and *Lycænidæ* are very numerous, and so are *Papilionidæ*. In the last-named family there are some very handsome species. The *Hesperiidæ* are represented by at least twelve species. Moths are also abundant, and some very fine specimens, including the Death's-head, belong to the *Sphingidæ*. Of the *Zygænidæ*, or burnets, *Agaristidæ*, *Uraniidæ* or pages, and *Ægeriidæ* or clear wings, there are various species. Of the silkworms, the most common is the Tusser-moth (*Antheræa mylitta*), but its cocoons are not collected or utilized, as they are in Northern India. *Attacus atlas*, the magnificent Atlas-moth, is also found, though rarely. *Actias selene*, also a large moth, is more common. It is of a milky blue colour, has a long tail, and lives chiefly on the *Odina Wodier* trees.

Diptera or flies are very abundant. The ordinary house flies and blue-bottles belong to the genus *Musca*. The mosquito is a *Culex*, and the flea a *Pulex*. Little attention has been paid to this class of insects, and there can be no doubt that a vast number of new species await the industrious collector.

Rhynchota.—The shield and plant bugs are well known in Southern India. Some of the former, such as the *Callideæ*, are of

great beauty, their scutellium, which gives them the appearance of beetles, showing brilliant metallic tints. The 'green bug,' which emits an offensive odour when irritated, belongs to this family; the bed-bug is *Acanthia lectularia*. The *Nepa*, or water-scorpion, is a large-winged, brownish, flat insect, which sometimes flies into houses at night. The sub-order *Homoptera* includes some interesting Indian insects, such as the *Cicada* or knife-grinder, the splendid *Fulgora* or lantern-fly, the *Aphididæ* or plant-lice (to which belongs the terrible *Phylloxera vastatrix* of France), *Coccus Lacca*, the lac-insect. The coffee-bug, a destructive pest, is *Lecanium Caffeæ*.

Arachnida.—This class includes spiders, scorpions, mites, etc. Some of the most formidable-looking of the spiders belong to the genus *Mygale*, which prey on insects of various kinds, such as cockroaches, and even attack lizards, and, in some parts of the world, small birds. The body of a large Mygale is as much as 3 inches in length.

Numerous web-making spiders (*Epeiridæ*) live out of doors, and some of them make very strong snares. The wandering Saltigrade spiders (*Salticidæ*), which hunt their prey like a cat, are common; and so are the wolf-spiders (*Lycosidæ*), which attain a considerable size, and carry their ova about with them in a globular bag attached to the abdomen. Some of the crab-spiders, which frequent flowers, often exhibit protective colours, and when alarmed feign death. They are exceedingly common on tropical plants. The house-spider, a species of *Tegenaria*, is well known, and so is the allied spider that spreads out its web on the grass around a funnel-like tube which forms its den. The latter probably belongs to the genus *Agelena*. A trap-door spider is common about Gooty, and another has been found at Utakamand.

A beautiful small spider (*Trombidium*), belonging to the *Acaridea* or mites, is common on plants at certain seasons; on account of its beautiful coat which simulates scarlet velvet, it is often supposed to be a cochineal insect. Some species of this group (*Trombidiidæ*), such as *Phytopus* and red spider (*Tetranychus*), are very injurious to plants. A mite (*Demodex folliculorum*), which lives in the sebaceous follicles of man, causes mange in the dog; and the eyeless *Sarcoptes scabiei*, which produces itch, is only too well known in the oriental region. A curious insect, belonging to the *Phalangidea* or shepherd-spiders, is seen in some parts of the country. It has a small body but very long legs, and is generally found in clusters of fifty or more which look like a bunch of hair. It belongs to the genus *Phalangium*. The insect called *jalamandalum* by natives, to the bite of which they attribute highly poisonous properties, appears to be in some districts a *Mygale*, and in others a *Solpuga*, also a forbidding-looking and pugnacious arachnid.

A much maligned and ill-used insect is the Fish-poochie, a species of *Lepisma*, so often seen in books, where in company with a *Chelifer*

it preys on the enemies of literature, being carnivorous. A remarkable animal belonging to the *Arachnidæ* is the *Thelyphonus*. It looks like a scorpion without a tail, and the bite of some of the South American species is supposed to be poisonous.

True scorpions are common, especially in dry districts, such as Karnúl. The large black scorpion, common in most parts of the country, is the *Buthus afer*. It sometimes attains a length of 6 inches; and its sting, if not fatal, as stated by natives, at any rate causes intense depression bordering on collapse, and very severe pain. A considerable number of deaths are sometimes said to occur in Karnúl from the sting of a middle-sized streaked brownish scorpion, *Androctonus quinquestriatus*. The species of Androctonus, 'man-killer,' are chiefly African, and, curious to say, the natives there entertain the belief that their sting is fatal to life. The little red scorpion, which frequents houses, is a species of *Scorpio*. Scorpions are not unmitigated evils, as they prey on insects which they kill by stinging them.

Myriapoda.—Some of these, belonging to the *Chilognatha* or millipedes, are quite harmless. To this section belong the species of *Julus*, large, hard-crusted, glistening, black-coloured animals, which crawl about in gardens, and coil themselves up like a watch-spring when touched. A number of species of 'myriapods' belongs to the *Geophilides*, which live in flower-pots and under stones, where they prey on decomposing vegetable and animal matter. The most formidable of the family are the *Scolopendridæ*, or centipedes, the bite of which is very venomous. One species of *Scolopendra* attains a length of 10 or 11 inches, and smaller ones frequent dwellings.

CRUSTACEA.—Of the *Xiphura*, there is one genus (*Limulus*), the king-crab, which existed in the Oolitic period. The head and thorax are united and protected by a large shield-like carapace. All the other genera of this order are fossil. There is one genus (*Squilla*), belonging to the *Stomatopoda*, which looks somewhat like a big aquatic mantis. The *Decapoda* have a number of genera in South India. To the *Macrura* section of the order belong prawns, species of *Penæus*, forms of *Scyllaridæ*, such as *Thenus* and the beautiful craw-fish *Palinurus*. In the *Anomura* group we find *Pagurus*, the hermit-crab, *Hippa*, and *Dorippe*. The *Brachyura* group embraces a number of genera, viz. *Dromia*, *Philyra*, *Leucosia*, *Calappa*, *Matuta*, *Plagusia*, *Grapsus*, *Ocypode* and *Cardisoma* land-crabs, and various species of *Lupa*, *Portunus*, and *Scylla*, edible sea-crabs. The swift-footed sand-crab seen on the shore is an *Ocypode*, and the 'calling crab,' a *Gelasimus* with one big arm which it waves aloft, is common in the banks of canals.

Madras City.—Capital of the Madras Presidency, situated in lat 13° 4′ 6″ N., long. 80° 17′ 22″ E. These are the bearings of the Madras Observatory; but the town, with its suburbs, extends 9 miles along

the coast, and runs 3½ miles inland, covering an area (1881) of 27 square miles. According to the Census of 1871, Madras contained 397,552 inhabitants, living in 51,741 houses. According to that of 1881, Madras contained 405,848 inhabitants, living in 48,286 houses.

History.—The derivation of the name is doubtful. *Mandaráj*, or *Mandala Ráj*, both words implying 'Government,' and *Madrissa*, a Muhammadan school, have been suggested as the etymology. Dr. Burnell favours the latter. The native name is Chennapatnam or the city of Chennappa, the brother of the local chief or *Náyak* at the time of its foundation. The name Madraspatnam seems to have been in use almost from the same date. In March 1639, Mr. Francis Day, Chief of the Settlement at Armagáon, obtained from the representative of the Hindu power of Vijayanagar, Srí Ranga Rayal, Rájá of Chandragiri, a grant of the site of land on which Madras now stands. A factory, with some slight fortifications, was at once constructed; and, induced by favourable terms, a gradually increasing number of natives settled round the walls.

In 1653, Madras, which had previously been subordinate to the Chief of Bantam in Java, was raised to the rank of an independent Presidency. In 1702, Dáúd Khán, Aurangzeb's general, blockaded the town for a few weeks; and in 1741, the Maráthás attacked it, also unsuccessfully. The fort was extended and strengthened in 1743, and by this time the city had become the largest in Southern India. As early as 1690, some attempt had been made to protect Black Town by a mud wall. In 1702, the necessity of improving this was brought home to the people by the advance of Dáúd Khán; and a tax was raised for the purpose. From time to time, when danger threatened, this tax was re-enforced. But in periods of peace it was found difficult to draw contributions from the people; indeed, when it was attempted in 1684 for the fort defences, a riot ensued. The result of these imposts was a maṣonry wall, or 'bound hedge,' round the north and west sides of the town, with eleven bastions. Many traces of the wall still exist, and some of the bastions have been converted into police stations or *thánás*. A curious monument of this defence is preserved in the name of the street lying within the line of the west wall, which is popularly known as 'Wall-tax Road' to this day.

In 1746, the French commander La Bourdonnais bombarded and captured the Madras fort. It was restored to the English two years later by the treaty of Aix-la-Chapelle, but the Government of the Presidency did not return to Madras till 1752. In 1758, the French under Lally occupied Black Town and invested the fort. The siege, which has been vividly described by Orme, was conducted on both sides with great skill and vigour. After two months, the arrival of a British

fleet relieved the garrison, and the besiegers retired with some precipitation. With the exception of the threatening approach of Haidar Ali's horsemen in 1769, and again in 1780, Madras has, since the French siege, been free from external attack.

The town of SAINT THOME, now an integral part of Madras city, was founded and fortified by the Portuguese in 1504, and was held by the French from 1672 to 1674. Sacked by Zulfikár Khán in 1698, it was occupied in 1749 by the English, who expelled the French priests as political emissaries.

Appearance.—Although at first sight the city presents a disappointing appearance, and possesses not a single handsome street, it has several edifices of high architectural pretensions, and many spots of historical interest. Seen from the roadstead, the fort, a row of merchants' offices, a few spires and public buildings, are all that strike the eye. The site is so low that it is difficult to realize that behind the first line of buildings lies one of the largest cities in Asia. Roughly speaking, Madras consists of (1) Black Town, an ill-built densely populated block, about a mile square, within the old city wall, with more or less crowded suburbs stretching three miles north of the Cooum river. This is the business part of the town, and contains the banks, customs house, High Court, and all the mercantile offices. Many of the latter are handsome structures, and fringe the beach. On the sea face of Black Town are the pier and the new harbour. The harbour is still (1885) in course of construction, owing to the damage caused by the cyclone and furious sea of November 1881.

Immediately to the south of Black Town there is (2) an open space with a sea frontage of about two miles, and a depth of three-quarters of a mile, which contains the fort, esplanade, brigade parade ground ('the Island'), Government House, and several handsome public buildings on the sea face. (3) West and south of this lung of the city comes a series of crowded quarters known by various native names—Chintadrapet, Tiruvaleswarampet, Pudupák, Rayapet, Kistnampet, and Mylapur, which bend to the sea again at the old town of Saint Thomé. (4) To the west of Black Town are the quarters of Veperi and Pudupet, chiefly inhabited by Eurasians; and the suburbs of Egmore, Nangambákam, Chetpet, Pársíbákam, and Perambúr, adorned with handsome European mansions, in spacious 'compounds' or parks. (5) South-west and south lie the European quarters of Tanampet and the Adyár.

The city of Madras is thus spread over a large area; and it is only after some stay that one realizes the stately semi-suburban life which distinguishes it from the more concentrated social activity of Calcutta. In short, a very large proportion of the tract of country comprised within the municipal limits of the city of Madras—covering

as it does an area of 27 square miles, with 14 villages—consists of a poor rural district, more or less under cultivation, which surrounds the fort and the native town and suburban villages. This suburban and semi-rural characteristic explains the recurring difficulties of municipal administration, and the chronic inadequacy of its finances for the services to be performed over so large an area. The moderate resources furnished by a poor and partly rural population have to be scattered over an area many-fold larger than that included under the management of the wealthy corporations of Calcutta and Bombay, with the inevitable result of apparent shortcoming in many details. Efforts have been made by recent legislation to improve the municipal resources.

The main thoroughfare of the town is the Mount Road, opened in 1795, which leads from Fort St. George to St. Thomas' Mount. This is a fine avenue, but the houses along it for the two first miles are, with a few exceptions, disappointing. The Cathedral Road, crossing it at right angles, and the Mowbray Road, are also wide and well laid out; the latter possesses a magnificent avenue of banian trees.

The Adyár river flows at the southern extremity of Madras from west to east, and falls very languidly into the sea south of Saint Thomé. This river is spanned by the Elphinstone Bridge, probably the largest in Madras. The Cooum river falls into the sea within municipal limits. Its course is short; and, except during the north-east rains, the volume of water it carries is insufficient to keep open the discharge into the sea. A backwater is thus formed round 'the Island,' skirting the fort and Government House grounds, whose stagnant condition, aided by the drainage of one or two suburban villages on its banks, has proved at times a serious drawback to the sanitary condition of the neighbourhood. The bar of sand at the mouth of the Cooum is usually breached by the early floods of the north-east monsoon, and open communication with the sea continues for some months. The Cooum is in communication with the Pulicat backwater, the Cochrane canal, and with the Adyár river and Southern canal system, by the junction canal through Saint Thomé.

South-west of the island formed by the circuitous course of the Cooum river, stands Government House, the city residence of the Governor. The chief entrance is from the Mount Road. Its Banqueting Hall is supposed to be planned in imitation of the Parthenon at Athens.

A considerable area is kept open to the west and north by several large tanks, while two parks and the horticultural gardens give additional breathing space. The South Beach promenade and the People's Park, containing a small zoological collection, are the principal recreation grounds of the city. The latter has an area of 116 acres, and is dotted with artificial lakes of various sizes.

Among the buildings most deserving of notice for their architectural features, are the Cathedral, Scotch Kirk, Government House, Patcheappah's Hall, Memorial Hall (to commemorate the escape of Madras from the effects of the Mutiny of 1857 in Upper India), Senate House, Chepák Palace (Revenue Board), College, Central Railway Station, and combined Telegraph and Post-office. The Cathedral and Scotch Kirk were built in 1816 and 1818 by Major de Haviland. Both are, in their general outline, Ionic; and in both, the polished Madras *chunam* work, which has very much the effect of marble, is to be seen in great perfection.

Mr. Chisholm, the Government architect for Madras Presidency, says: 'Until quite recently, the material for building consisted of inferior brick plastered, the plaster being moulded to imitate any or every kind of European detail. A trabeated form of Italian, with wooden architraves, was the favourite style. The two buildings of note, constructed during this "plaster period," are the Scotch Kirk and Patcheappah's Hall; the former on account of its boldness of conception and constructive truthfulness, and the latter for its beauty and purity of design. Since 1864, when stone from Cuddapah and Sholingarh was introduced for building purposes, local architecture has been slowly working towards an adaptation of the Hindu Saracenic. The new Senate House, with the exception of the Byzantine terminations, is wholly in that style.' The Chepák Palace, formerly the residence of the Nawáb of Arcot, and now magnificently restored as the office of the Board of Revenue, is a striking specimen of the school referred to. The Chepák Park stands on the site of what was formerly the domain of the Karnátik Nawábs. The Senate House, the Chepák Palace as it now appears, and the College have all been erected in the last fifteen years. The Madras Club is large, comfortable, and centrally situated, 2 miles south-west of the fort. The principal public statues are those of Sir Thomas Munro, Lord Cornwallis, and General Neill.

Fort St. George, formerly known as 'White Town,' commenced in March 1639 by Mr. Francis Day, originally consisted of a factory and other buildings surrounded by a wall, with four slight bastions and batteries, the whole being about 400 yards long by 100 deep. In 1643 it had cost about £3500, and was garrisoned by 100 men, the number being reduced a few years later to 26. Between 1670 and 1680 some effort was made to improve and strengthen the position, —a necessity forced on the Company by the successive retirement and encroachment of the sea, by the presence of the French at Saint Thomé, and by the threatening advance of the Maráthá leader Sivají.

In 1702 the fort bore its first attack, when Dáúd Khán blockaded it for three months. In 1723 the Mint was built within its walls; and

in 1740, Mr. Smith submitted a scheme for making the fort defensible, and for doubling its enclosed area. This was partially carried out, when La Bourdonnais sat down before the place, and captured it after a short bombardment (1746). When, three years later, the English re-entered the fort, they found it greatly improved, the *glacis* to the north had been made, and the bastions and batteries enlarged. Mr. Robins was now deputed to complete the French work; he adopted Mr. Smith's plans, and for two years 4000 labourers were continuously employed. Mr. Robins formed the *glacis* to the west, deepened the ditch, enlarged the old bastions, formed four new ones to the west, to include the new ground taken up on that side, and added new batteries. So that in 1758, when the French returned under Lally, the place, although far from perfect, was fit for Pigott and Lawrence to defend. Immediately after the siege, works were continued under Mr. Call and Colonel Ross, till, in 1787, the fort was completed very much as it now stands.

Although suitable for the purpose for which it was designed, the fort is not tenable against modern artillery, and its walls are in many places in disrepair. Within it are nearly all the principal Government offices — the Secretariat and Council Chamber, the military head-quarters, arsenal, and barracks. The houses are almost all two or three stories high, in compact blocks extending the entire length of streets laid out in straight lines. Unlike the houses in the city generally, the fort residences have no 'compounds' or enclosures. The arsenal contains many curious trophies of the wars in which the Madras army has been engaged. In St. Mary's Church are buried the missionary Schwartz, Sir Thomas Munro, Sir Henry Ward, and Lord Hobart, a former Governor. St. Mary's Church was commenced in 1678 and finished in 1680. It is the first English Church in India, and the oldest Protestant place of worship in the Madras Presidency.

As the seat of the Madras Government, and the head-quarters of the Madras army, nearly all the most important offices of the Presidency, and the head-quarters of every department, are located in Madras. Apart from the head-quarters staff of the Madras army, those of the Eastern military Division are also stationed here, with a garrison of 1 European and 2 Native infantry regiments, a half battery of garrison artillery, and the body-guard of the Governor (100 sabres). At St. Thomas' Mount are 2 field batteries, with a half battery of garrison artillery and a detachment of Native infantry. Including these, the garrison of Madras is about 3250 strong, of whom 1134 are Europeans.

Population.—The old estimates of the population of Madras were curiously upset by the results of the Census of 1871. In 1763 it was calculated at nearly a million, and subsequently the official estimate fell to 750,000. An enumeration in 1822 returned 470,000; another in 1866, 450,000; and the next in 1871, 397,552 persons. The last

general Census of 1881 gave a total of 405,848 persons, of whom 200,170 were males and 205,678 females, the proportion of males being a fraction under 50 per cent. Since 1871, therefore, there has been an increase of 8296, or 2·09 per cent. Since 1871, the number of houses has increased nearly 25 per cent. The number of houses was 51,741 in 1871, and 64,550 in 1881, of which 48,286 were occupied. The area of the town being taken at 27 square miles, this gives an average of 15,031 persons and 1788 occupied houses per square mile. But as about 3½ square miles consist of parks, esplanades, etc., these figures understate the actual density of population, which varied from 93,628 per square mile in the second division, to 2781 in the fourth. The average number of occupants per house in 1881 was 8·3. The proportion of males to females was 493 to 507. Classified according to age, there were—under 15 years of age, males 68,223, and females 67,954; total children, 136,177, or 33·5 per cent. of the population: 15 years and upwards—males 131,905, and females 137,663; total adults, 269,568, or 66·4 per cent.: age not stated—males 42, and females 61; total, 103.

Religions.—In 1881 the Hindu population of Madras (inclusive of the lower castes, whose claim to be considered Hindus is doubtful) consisted of 315,527 individuals; of these 156,336 were males and 159,191 females: number of children under 10 years, 92,785. The next great section of the community are the Musalmáns. Their numbers, ascertained by the Census of 1881, were 50,298, the proportion of the sexes being 24,398 males and 25,900 females. Since 1863, if the returns of that year are to be trusted, the Muhammadan population has decreased by about 21 per cent. Christians numbered 39,631, namely, 19,182 males and 20,449 females. The mixed class of Eurasians was composed of 12,659 persons, of whom 6100 were males and 6559 females. The number of Europeans entered in the Census schedules is 3205, viz. 2004 males and 1201 females. Out of every 1000 people in 1881 there were 777 Hindus, 124 Muhammadans, 98 Christians, and seven 'others.' The proportion of Christians is higher in Madras city than elsewhere in the British Districts of the Presidency, and the proportion of Muhammadans is higher than elsewhere except in Malabar. Since 1871, the Hindus have gained 2 per cent., and the Christians 7 per cent. The Muhammadans have decreased by 1·33 per cent. In 1881 the population contained an admixture of 113 Jews, 129 Brahmos, 27 Pársís, 51 Buddhists, and a few of no stated religion. The Europeans since 1871 have decreased by 11·3 per cent., while the Eurasians have increased by 5·3 per cent. Tamil is the language chiefly spoken, being used by 239,396, or 58·9 per cent. of the whole population. Telugu is the language of 94,478 persons; Hindustání of 46,426; English of 17,110; Maráthí of 4238; Kánarese of 1186; and 'other tongues' of 3014 persons.

Distributed by castes, the Census of 1881 thus discriminates the Hindu population:—Bráhmans (priests), 13,469; Kshattriyas (warrior caste), 6336; Shetties (traders), 22,005; Vellálars (agriculturists), 89,275; Idaiyars (shepherds), 11,167; Kammálars (artisans), 14,010; Kannakan (writers and accountants), 2450; Kaikalars (weavers), 11,134; Vannians (labourers), 33,176; Kushavans (potters), 854; Satánís (mixed castes), 6397; Shembadavans (fishermen), 10,273; Shánáns (toddy-drawers), 9102; Ambattans (barbers), 3520; Vannáns (washermen), 2556; Pariahs (outcastes), 54,706; and 'others not stated,' 25,097. Although the number of Vellálars or agriculturists is high, there is practically no agricultural work carried on in Madras city. The high proportion of Vellálars therefore illustrates the extent to which castes are departing from their hereditary occupations. The number of male adult persons actually employed in cultivation is returned at under 10,000.

With reference to occupation, the Census distributes the adult male population into the following six main groups:—(1) Professional class, including State officials of every kind and members of the learned professions, 17,424; (2) domestic servants, inn and lodging keepers, 9321; (3) commercial class, including bankers, merchants, carriers, etc., 18,488; (4) agricultural class, including shepherds, 7397; (5) industrial class, including all manufacturers and artisans, 36,870; and (6) indefinite and non-productive class, comprising male children, general labourers, and persons of unspecified occupation, 170,670.

In 1881, the number of persons of unsound mind in Madras city was 496; of blind, 901; of deaf and dumb, 132; and of lepers, 435.

Revenue.—The quit-rents of Madras town were originally collected by the *Conicopollies* (a word derived from 'Kannakan,' the writer and accountant class), and paid directly to the general treasury. Later, when dues were charged on betel, tobacco, and other commodities at the *chaukis* in the 'Bound Hedge,' an officer, called the 'Land Customer,' was appointed to superintend collection of these dues, as well as of the quit-rents, spirit revenue, and numerous other charges, known by the generic name of *mutarfa*. In 1798, the 'home farms' (certain villages of the *Jágír*) were added to the charge of this officer, who shortly afterwards was designated Collector of Madras. In 1860, the public revenue of Madras city (excepting sea customs) was transferred to Chengalpat (then called Madras) District. This arrangement has, since 1870, been altered; and all the Government revenues, including sea customs, within municipal limits are now entrusted to the Collector of Madras.

Municipal.—The earliest measure of municipal government consisted of the appointment of watchmen and the imposition of a scavenger cess, in 1678. At various periods, small cesses on trades and com-

modities appear to have been levied for town purposes, but whether at any time the quit-rents were directly devoted to similar objects is not clear. The '*Conicopollies*' Fund' was assigned in 1735 for the maintenance of bridges and roads, and a little later this was augmented by the profits on public lotteries. From 1688 the Mayor and Corporation had control of municipal work and funds. In 1793, an Act allowing the imposition of municipal taxes was passed; and in 1798, a Committee was appointed for the better administration of the town. Rules for markets and public conveyances, and a provision tariff, were drawn up by this body, and at the same time a portion of the excise revenue was devoted to municipal purposes.

No trace of further municipal legislation for the town of Madras is to be found till 1841; but since that date there have been numerous enactments on the subject. Municipal Acts were passed in 1856 (when the functionaries administering the funds were first styled Municipal Commissioners), 1865, 1867, 1871, 1878, and 1884. In 1867, the principle of representation was first asserted; but the appointment of the four Commissioners who were to represent each of the city's eight divisions was made by Government. In 1878, it was laid down that 32 commissioners should be appointed for the whole city, of whom 16 were to be chosen by the ratepayers, and 16 by the Government. The Commission now consists (1884) of a paid President (with other officers), and 32 honorary Commissioners, three-fourths elected and one-fourth nominated by the Governor in Council. There are two vice-presidents, one in charge of public works, and the other of conservancy and sanitation. A special sanitary officer may be appointed by Government when any epidemic or unusual mortality prevails. The President is appointed by Government, and paid from municipal funds.

The municipal revenue of Madras city is derived from the following sources:—(1) Tax on carriages, carts, and animals, about £7000; (2) tax on arts, professions, trades, etc., £5000; (3) licence fees, £900; (4) rents, £3750; (5) tolls, £4200; (6) liquor licences, £1350; (7) house and land rate, not exceeding 10 per cent. of the average annual gross rental, £34,500; (8) water-tax, £13,400; (9) lighting-tax, £4200; (10) miscellaneous receipts, £8700. The tax on carriages and animals varies from 6d. half-yearly for asses to £1 half-yearly for four-wheeled vehicles drawn by two horses. The cart-tax is about 4s. each cart or vehicle without springs half-yearly. The tax on licensed premises varies from £1, 4s. to £7, 10s. yearly. The miscellaneous receipts include revenue from a water-tax on houses, buildings, and lands not exceeding 4 per cent. of their gross annual rent; a lighting-tax not exceeding 2 per cent. on such rents; and tolls upon vehicles and animals entering municipal limits, varying from ¾d. to 1s. The total municipal income of Madras city in 1882–83

was £85,404, of which £74,150 was derived from taxation. Average incidence of taxation, 3s. $7\frac{3}{4}$d. per head.

In 1882, a loan of £35,000 was raised by the municipality for the purpose of commencing the drainage works of Black Town, and completing the extension of a proper water-supply throughout the city. A complete system of water-supply has not yet been carried out; and a new scheme for increasing the discharge from the head-waters at the Red Hills, and its thorough infiltration, is under the consideration of the Madras Government. The drainage works of Black Town have now (1884) been brought into operation over a large area, and are being pushed rapidly towards completion. The cost of conservancy in Madras in 1882–83 was £24,669; the conservancy establishment consisting of 1219 coolies, 621 carts, and 5 canal barges. The cost of lighting the town was in the same year £2998; the number of lamps, 2643. The expenditure is in the following proportions:—Establishment, £10,400; sanitation, £26,500; roads, £10,400; lighting, £3600; water-supply, £2500; medical, £3900; education, £1500; interest on debt and sinking fund, etc., £13,300; and miscellaneous, £10,500.

Notwithstanding its narrow means, the Municipal Commission has given the city a pure water-supply at a cost of about £154,500. To effect this work, two reservoirs of native construction were enlarged, so as to contain 102 millions of cubic yards; and their supply was improved by constructing an anicut or weir across the Cortelliar river, with a supply channel to the upper part of the two reservoirs, and a connecting channel between them. The upper reservoir is called the Cholávaram tank. Its area is 1543 acres; and the depth of water at the lowest sluice is 20 feet. The other reservoir is the Red Hills tank, with an area of 4869 acres, and a maximum depth of 21 feet. The water is conveyed to Madras in an open high-level channel, 7 miles long, with strainers at both ends. This channel terminates with a masonry shaft, from which the water is delivered at a level of $29\frac{1}{2}$ feet above mean sea-level into a distributing system of cast-iron pipes. The pressure is sufficient to raise the water 8 or 10 feet above ground level in all parts of the town. The annual consumption is about 5,000,000 cubic yards. In addition to supplying the city of Madras with water, the Red Hills tank is largely drawn upon for irrigation; revenue to Government from this source in 1882–83, £484. In 1884, the waters of the Red Hills tank rose and burst their barriers. Several persons were drowned, and a water famine threatened the city. Madras requires, among many wants, the complete re-sanitation of the river Cooum. In 1882, 25 per cent. of the municipal expenditure was devoted to conservancy, but even this proportion is insufficient.

Port Trade, etc.—Notwithstanding its exposed situation, Madras ranks third among the ports in India, in respect of the number and tonnage

of vessels calling, and the value of its imports and exports. The average annual value of the total external trade of Madras port, exclusive of Government stores and Government treasure, for the five years ending 1883–84, was—imports, £4,758,782; exports, £4,180,549; total, £8,939,331. In 1883–84, the total external trade was—imports, £5,390,742; exports, £4,764,711; total, £10,155,453. The average annual number of ships which entered and cleared Madras port for the five years ending 1883–84 was 1391, of 1,302,469 tons, of which 717 were steamers, of 1,122,151 tons. In 1883–84, the number of ships which entered and cleared Madras port was 1241, of 1,442,813 tons, of which 756 were steamers, of 1,304,824 tons. During the famine year (1876–77), the number of vessels which entered and cleared was 1685, of 697,135 tons.

The port trades with every part of the world, exporting coffee, cotton, grain, hides, indigo, oil-seeds, dye-stuffs, sugar, and horns; and importing piece-goods, iron and other metals, and all kinds of European manufactures. It is regulated by legislative enactment, and administered by a Master Attendant, with a deputy and two assistants.

Passengers and cargo were formerly landed or embarked by the indigenous *masúla* boats, built of mango wood, caulked with straw, and sewn together with cocoa-nut fibre. The incoming vessel anchored in the roads about a mile or half a mile from the shore: the *masúla* boat pulled alongside, received her freight of passengers or goods, and was beached through the surf. Not seldom the boat was split on reaching the beach. When the sea is running high, the rise and fall of the *masúla* boat at the ship's side is as much as 25 feet; so that disembarking is generally difficult and sometimes dangerous. Ladies used to be firmly secured in chairs, and thus gradually lowered into the *masúla* from the ship's yard-arm. In 1859, however, landing was rendered less precarious by the erection of an iron pier, which was finished in 1862, opposite the custom house and jutting out 300 yards into the sea. The pier is 40 feet broad and 20 feet above sea-level; has stairs down to the water, rails, cranes for haulage, and other appliances. The cost of building the pier was £110,000; and although but a poor substitute for a harbour, it was found very useful during the famine of 1877–78, as many as 12,000 bags of rice having been landed there in a single day. It has been twice breached by vessels drifting through it, and repaired at a cost of £40,000. At present, the landing and shipping of goods is effected partly by lighters to the pier-head, and partly by the old *masúla* boats. There are 60 of the former and 100 of the latter on the register.

There are special local difficulties in the way of making an artificial harbour. The town of Madras itself lies low, from mean sea-level to 24 feet above it. The shore is sandy, and stretches almost in a straight

line for some miles, so that no creek affords the outline of a harbour. An enclosed harbour, which had been commenced in 1876, was practically completed in September 1881, and opened to the shipping. The whole of the rubble base of the harbour works was completed, the north pier was brought to its full length, the south pier nearly finished, and the open space between the two pier-heads had been brought to the exact width for the harbour entrance, 550 feet. Nearly one million (930,758) tons of stone had been deposited for surf banks and rubble bases; the length of breakwater was 7836 feet; and the number of concrete blocks laid, 13,309. The cyclone of 12th November 1881, however, did serious damage to the works. Half a mile of breakwater was breached, the two top courses of concrete were thrown over into the harbour, and the rubble base was lowered and spread out. The reconstruction of the harbour is now (1884) under consideration. The harbour, when completed, will be an almost enclosed basin formed by running out two solid piers from the shore 500 yards north and south of the iron pier, to a length of 1200 yards from the shore, into $7\frac{1}{2}$ fathoms water. At that point they turn or bend inwards to form an enclosure, with an entrance in the centre 550 feet wide. These piers will enclose a space 1000 yards long and 830 yards broad, with a maximum depth of 7 fathoms of water. The area which will be thus available is calculated to afford shelter to 13 ships of various sizes, ranging from 700 to 4000 tons. The harbour having now again sufficiently advanced to be of considerable value to the trade of the port, it has been thought necessary that *ad interim* arrangements should be made for the levy of dues, in consideration of the advantages and facilities afforded. Accordingly, harbour dues have been levied since April 1884 under the Madras Act VI. of 1882. The lighthouse, a Doric column of granite 125 feet high, contains a first-class white flashing catadioptric light. It was erected at a cost of £7500 in 1844, and is visible from a ship's deck 15 miles at sea.

The roadstead of Madras, like the whole line of the western coast, is liable to be swept by hurricanes of irresistible fury, which occur at irregular intervals of years, generally at the beginning of the monsoons in May and October. The first recorded cyclone was in October 1746, a few weeks after the fort had surrendered to La Bourdonnais. A French fleet with its prizes then lay at anchor in the roads. Five large ships foundered, with 1200 men on board; the *Mermaid* and *Advice*, prizes, also went down; and scarcely a single vessel escaped with its masts standing. Yet the cyclone was not felt at Pondicherri on the same coast, about 100 miles away. Other hurricanes causing serious loss of life happened in 1782, in 1807, and in 1811. In the last the frigate *Dover* was lost, and 90 country boats went down at their anchorage. Perhaps the most destructive of these storms occurred in May 1872. On this

occasion the registered wind pressure reached a maximum of 53 lbs. to the square foot. The shipping in the roads did not receive sufficient warning to allow them to slip their cables and put to sea. In the space of a few hours, 9 English vessels, with an aggregate tonnage of 6700 tons, and 20 native craft, were driven ashore. Fortunately, day broke when the calamity was at its height; and the rocket apparatus, skilfully used, saved the lives of all except 19 men. In May 1874, another cyclone broke on the Madras coast, but the ships were warned in time to put to sea and gain an offing. The most recent of these periodical hurricanes were in May 1877, and November 1881. The last, as already stated, did serious injury to the new harbour. A carefully prepared code for the guidance of all concerned on the occurrence of a hurricane has been sanctioned by Government.

Industries.—The trade of the town does not depend on any special local manufactures or produce. Such industries as once flourished—weaving for instance—have decayed, and no others have grown up to replace them. As elsewhere in India, spinning companies have recently been formed, but their effect on local trade remains to be seen. With the exception of banks, and enterprises connected with the preparation of produce for export, *e.g.* cotton-pressing and coffee-cleaning, joint-stock undertakings have not prospered.

Live Stock, Prices of Produce.—The number of buffaloes in Madras city in 1882–83 was 1890; of bullocks, 3692; of cows, 2390; of donkeys, 364; of elephants, 2; of goats, 780; of horses, 2330; of mules and ponies, 1886; of sheep, 2210; and of pigs, 315. Number of carts, 3510; of ploughs, 825; and of boats, 191. In the same year rice sold at 4s. 8d. per *maund* of 80 lbs.; *ragí*, 2s. 4½d.; *cholam*, 3s. 2¼d.; *kambu*, 2s. 6d.; wheat, 5s. 7½d.; salt, 4s. 8d.; sugar, 13s. 4d.; linseed, 15s.; jute, £1; cotton, £1; indigo, £18. In Madras city in 1882–83, a plough bullock cost £2; a sheep, 4s. 6d.; and fish, per lb., 6d. Skilled labour is remunerated at the rate of 2s. a day; and unskilled labour at 9d. a day. The rate of hire for a draught bullock per diem is 1s.; of a horse, 4s.; of a mule or pony, 3s.; of a boat by sea, £1; of a boat by canal, 6s.; and of a cart, 6d.

Sporting.—The neighbourhood of Madras city affords little attraction to the sportsman. Large game is not obtainable, and small game is scarce. During the cold weather, snipe and teal are found, although in no great numbers, at Guduvancheri, a village 22 miles away. It is an open but hilly country, with a travellers' bungalow on the high road leading to Chengalpat. Bird Island, reached by way of the Buckingham Canal, has a reputation for feathered game; and the Nagari Hills, 57 miles N.W. of Madras, are a resort of those in search of larger game. The Madras sportsman, however, generally makes his way to the Nílgiris.

Communications.—As the capital of Southern India, Madras is the

centre on which all the great military roads converge. From the three principal of these (No. I. running west, No. VI. north to Calcutta, No. VIII. south to Cape Comorin) branch all the Great Trunk roads, which, with their massive bridges and smooth hard wheel-ways, are among the greatest monuments of English rule. Madras is also the terminal station of two lines of railway, the Madras line and the Madras and Tuticorin section of the South Indian Railway. The Madras Railway, striking across the peninsula, links Madras with the west coast at two points nearly 600 miles apart—Bombay and Beypur—and, by branches, with Haidarábád, Bangalore, and the foot of the Nílgiri hills. A projected branch of the Madras Railway will tap the Ceded Districts. The South India Railway also starts from Madras, and brings the capital within easy access of all the southern Districts. The original terminus of the Madras Railway at Royapuram, a northern suburb of the city, was opened for traffic in 1856. It has been used for offices and stores since the present central station was opened in 1873. The South Indian Railway from Madras to Tuticorin was opened for traffic on the 1st September 1876, and completed throughout on the 1st July 1879. The terminal station of this line at Madras is Egmore; although the line originally laid as far as the beach, to facilitate harbour works operations, is also utilized for passenger and goods traffic. The telephone has been recently introduced into the general system of public communication in Madras. The city postal system is well arranged; number of pillar boxes, 47; daily deliveries, 3. Weekly communication with Europe is maintained by P. and O. steamers and the vessels of other lines.

The Buckingham Canal, which passes through an outlying part of the city, connects South Arcot District with Nellore and the Kistna (Krishna) and Godávari system of canal navigation. Its total length is about 253 miles. This long delayed project was undertaken as a famine work, to connect the Adyár and the Cooum.

Education, etc.—According to the Census of 1871, over 18 per cent., and according to that of 1881 over 24 per cent. of the population of Madras city could read and write, or were under instruction. In 1881, 97,796 persons were returned as educated or under instruction. The proportion of educated females in 1881 was 7·48 per cent.

Connected with the Education Department, there were in 1882–83 within the city, 5 arts colleges, with 785 pupils; 3 colleges for professional training, with 217 pupils; 14 English high schools, with 1263 pupils; 55 English teaching middle schools, with 3461 pupils; and 3 vernacular middle schools, with 8 pupils; 154 English teaching primary schools, with 9627 pupils; and 106 vernacular primary schools, with 3510 pupils. There were, besides, 54 high schools for girls, and 91 primary schools for girls; the former contained 462

pupils, and the latter 6322 pupils. Four normal schools had in the same year 134 pupils. 'Special' schools numbered 6, with 445 pupils. Total institutions, 495; total pupils, 26,234. The medical college had 208 pupils in 1882–83, of whom 8 were females. In the same year the number of engineering students was 70. The special institutions include a School of Arts (with 106 pupils in 1882–83); an Industrial School (40 pupils); and a school for Ordnance artificers (70 pupils).

In 1875–76, the total number of books published at Madras city was 781, of which 140 were original works, and 125 were in English. In 1882–83 the total number of books registered was 711, of which 153 were original works, and 97 were in English. Besides other periodicals, 9 English and 17 Native newspapers are published. In 1884, the number of English printing presses was 36, and of Native presses, 66.

Madras city has 3 bishops (1 English and 2 Roman Catholic); 15 Anglican churches, including the Cathedral; 2 Roman Catholic cathedrals, and 13 churches; 3 Scotch churches and 8 dissenting chapels, besides numerous meeting-houses and mission school-rooms used for prayer. There are also 10 Christian cemeteries. The first English church, St. Mary's, in the fort, finished in 1680, has already been referred to. The Cathedral has a fine organ, a good choir, and a peal of bells. There are many missionary societies, including the London, the Church, Wesleyan, Lutheran, American, 2 Scotch, and a Baptist Mission; Bible, Gospel, Christian Knowledge, and other Book Societies.

Judicial.—In old Madras, all criminal and civil disputes were finally referable to the Council; but from the commencement of its history, the 'Justices of the Choultry,' an unpaid Commission, consisting partly of natives, had jurisdiction in larcenies, minor misdemeanours, and petty civil causes. They also controlled the police. More serious cases were reserved for the decision of the Chief and Council. In 1688, the Mayor's Court was created with jurisdiction in civil and criminal cases. It held sessions for cases remitted by the Justices, and appeals lay to the Admiralty Court, created in 1684. In 1726, the powers of the Mayor's Court were extended by Royal Charter, a Small Cause Court was created, and for a few years was presided over by the Sheriff. In 1798, the Mayor's Sessions were replaced by a Recorder, and in 1801 by the Supreme Court. In the following year, the *Sadr Faujdári* Court was established by Regulation as the chief court for all cases beyond the limits of the original jurisdiction of the Supreme Court. In 1862, the Supreme and *Sadr* Courts were merged in the new High Court, created by Royal Charter, which possesses appellate jurisdiction, and also original jurisdiction, both civil and criminal, throughout the Presidency. A final appeal in important civil cases lies to the Judicial Committee of the Privy Council in London. The

Small Cause Court, and the Presidency magistrates, are the ordinary local courts of first instance for civil cases (except those sufficiently important to go before the High Court) and for all criminal business.

Police.—When the whole territory lay within the 'Bound Hedge,' the peace of the city was confided, after the fashion of the villages of the country, to hereditary watchmen paid by grants of land, thereafter pertaining to the office. Pedda Náyak, the first of these *taliáris*, has given his name to a large quarter of the town, built on his *inám* lands. In 1640, he had to find 20 peons for police work; in 1659, the number was raised to 50. In 1686, the Náyak or 'Madras Pálegár,' as he is styled in old papers, received a *kaul*, or grant, conferring increased emoluments, including the right to tithes upon the produce of certain trades, and a watch tax on houses, called the 'revenues from the sea-gate, choultry, and *bázár*,' in consideration whereof he had to furnish an increased force, as well as to provide escorts for officials, and to execute the processes of the justices. Except for a mention of the Náyak riding at the head of his peons at the ceremony of installing the Mayor in 1727, the history of the city police for 100 years is not traceable. In 1798, when a committee assembled to devise measures of municipal reform, Mr. Tolton sat, *ex officio*, as secretary to the police committee. It is therefore probable that the *pálegár* had been for some time under administrative control. His office was abolished in 1806; and a regular town police, which, however, retained most of the methods and persons of the old system, was formed. This has since given place to a remodelled force on the same lines as the provincial constabulary. The police force in 1882-83 consisted of a commissioner, a deputy, an assistant commissioner, and 980 subordinate officers and constables, including 8 mounted and 141 marine police. Total cost of establishment in 1882-83, £24,488.

Institutions.—Besides those already mentioned, the following institutions deserve notice:—The Observatory, the Museum, the Literary Society's Library, the Friend-in-Need Society, the Monegar Choultry, and the hospitals. The Observatory, from whose meridian all India takes its time, was established in 1792, Mr. Goldingham being the first astronomer. It originated in a small private observatory started in 1787 by Mr. W. Petrie, a scientific member of Council. It now contains a fine collection of instruments, including a large new equatorial, and a very efficient transit circle. Besides the regular meridional observations, the attention to casual phenomena, and the maintenance of a meteorological register, this Observatory has conducted much special work of permanent value in astronomical annals. The Meteorological Department, in connection with the Observatory, was established in 1867. In 1874, the Department was brought under the Meteorological Department of the Government of India.

Among the Madras public libraries, the Literary Society and auxiliary branch of the Royal Asiatic Society possesses a library of over 17,000 volumes. In 1851, the Society presented its collection of geological specimens to Government. This formed the nucleus of what is now known as the Government Central Museum. The natural history section embraces an extensive collection of birds, reptiles, fish, shells, and insects; besides a large herbarium and numerous mineralogical and geological specimens. There is also a very interesting collection of gold, silver, and copper coins; with numerous specimens illustrating the natural resources and manufactures of British India, and the manners, customs, and antiquities of the country. Attached to the museum is a reading-room and general library, and also a scientific library devoted to natural history. Altogether, there are upwards of 7000 volumes, besides a very extensive collection of patent office publications.

The Friend-in-Need Society of Madras, supported by voluntary subscription, supplemented by a Government grant, discharges, for destitute Europeans and Eurasians, the functions of a poor-rate. It was founded in 1807, and has ever since been a useful and well-supported institution, finding work for those able to do it, and gratuitous relief for the old and infirm.

The Monegar Choultry is one of the oldest and most excellent of the charitable institutions of Madras. Founded in 1808, the Choultry has been maintained by private subscription and Government grants in a state of great efficiency. It affords, without reference to caste, shelter, food, and clothing to the native poor and infirm, and contains many wards, named after their founders. It has at present accommodation for 250 inmates, and beds for 111 in its infirmary, besides affording out-door relief in 10,000 cases annually.

A small lying-in hospital was added to the Monegar Choultry in 1879, containing two wards for eight beds each. This hospital gives relief on an average to 450 women annually, of which number 150 are women of caste. During the famine of 1876–77, the Choultry and hospital afforded great help to Government by accommodating and otherwise providing for the famine-stricken population who resorted to Madras city for relief.

The General Hospital has wards containing 240 beds, exclusive of 80 beds in the annexes for contagious cases, and possesses all the appliances and accommodation of a first-class hospital. Its staff consists of a physician and 2 surgeons (one of whom is resident), 5 medical subordinates, a matron, 13 nurses, and about 40 attendants. Private rooms are provided for invalids who can afford to pay. A lying-in hospital, a hospital for women and children, a special asylum for foundling and stray children, and several dispensaries, supplement the usefulness of the larger institution.

The Saidápet Agricultural School, originally established as a Model Farm by Government in 1870 with a view to stimulate improvements in agriculture and farming throughout the Presidency, is situated on the road leading to St. Thomas' Mount, near the Marmalong Bridge and on the northern side of the Adyár. The agricultural school is supplied with workshops, veterinary hospital, reading-room, library, and an agricultural museum.

Climate, etc.—Madras is not ordinarily an unhealthy town, either for natives or Europeans. Its sea-breeze and dry soil appear to fully compensate for the lowness of the site. In the words of Dr. Cornish, the Sanitary Commissioner, its climate is, on the whole, favourable to the health of the native inhabitants. The temperature is high all the year round, but there are fewer sudden alternations of heat and cold than in most places in India. The mean temperature in the shade ranges between 74° and 87° F.; the extremes being 67° in January and 93° in June. The death-rate averages 40 per thousand per annum. In 1883 it was 62, but in nine years out of ten it ranges between 30 and 44 per thousand. In 1884 it was 39 per thousand. The mortality usually increases during the cold and rainy seasons, and is at its minimum during the dry hot months of April, May, and June. The registered birth-rate (1884) is about 40 per *mille*. The population is liable to periodical visitations of cholera and small-pox. The deaths from small-pox in 1884 were 1957, of whom 831 were infants under a year old. Elephantiasis and leprosy are endemic diseases on the coast; the former is generally seen in the form known as 'Cochin' or 'elephant leg.' The land rises slightly as the distance from the sea increases, but in no part of the municipal limits is the elevation more than 24 feet above the sea, while in many thickly populated neighbourhoods, the levels are so low as to offer serious obstacles to drainage. The rainfall of Madras varies considerably. In 1878, the rainfall was 28 inches; in 1879, 54 inches; and in 1881, 49 inches. The average annual rainfall over the town area, from observations taken over a period of 70 years, is 48·69 inches. The greatest fall is in October and November, when the rainfall varies from 10 to 13 inches each month. The chief outlets for the discharge of excessive rainfall are the Cooum river, the main drain of Black Town, and two minor channels between the Cooum and Saint Thomé. The heaviest rainfall usually occurs during the north-east monsoon, as much as 18 inches having been known to fall within twenty-four hours. The neighbouring country is liable to prolonged periods of drought, as well as to heavy floods. The number of persons vaccinated in Madras city in 1884 was 40,940, at a cost to the municipality of about 6½d. per case.

Madura (*Mad'hurá*).—British District in the south of the Madras Presidency, lying between 9° 4′ and 10° 44′ N. lat., and between 77° 14′

and 79° 20′ E. long. Area, 8401 square miles. Population, according to the Census of 1881, 2,168,680 persons. In point of size it ranks fifth, and in point of population third, among the Districts of the Presidency. It is divided into six Government *táluks;* and it also contains the two great *zamíndárís*, or estates, of Rámnád and Sivagangá, which cover an area of 3663 square miles. Madura is bounded on the north by the Districts of Coimbatore, Trichinopoli, and Tanjore; on the east and south-east by the waters of Palk Strait and the Gulf of Manár; on the south and south-west by Tinnevelli District; and on the west by the State of Travancore. The administrative head-quarters are at MADURA TOWN.

Physical Aspects.—Broadly speaking, Madura District consists of a section of the plain stretching from the mountains east to the sea, coinciding with the drainage basin of the Vaigai river. Along its south-western border the District abuts on the range of the Western Gháts, here known as the Travancore Hills, which separates south-west Madura from the native State of Travancore. The boundary line then crosses the eastern end of the highland plateau, which, lying south of the Palghát gap, comprises the continuation of the Western Gháts and Agamalla Hills (Malabar and Cochin) and the Anamalái (Coimbatore) and Palní ranges. The latter is included within the District of Madura. Trichinopoli and Tinnevelli Districts form the northern and southern boundaries. PALK STRAITS on the north, and the Gulf of Manár on the south of the Rámeswaram Reef or Adam's Bridge, separate the island of Ceylon from the mainland.

Madura District is chiefly a plain, sloping gradually to the south-east, as indicated by the channel of the Vaigai river. This plain, however, is broken in the west by the outlying spurs of the Gháts, and by a few isolated hills and masses of rock scattered over the country. The most important spur of the Gháts is that known to Europeans as the PALNI HILLS, but called by the natives, Varáha or 'Pig Mountains.' The Palnís project east-north-east across the District for a total distance of about 54 miles. Their highest peaks attain an elevation of more than 8000 feet above sea-level; and they enclose a plateau about 100 square miles in area, with an average height of 7000 feet. On this plateau, a sanitarium for Europeans has recently been established at Kodaikánal, and the business of coffee-planting is rapidly extending. Farther east, a confused group of hills, known as the Sirumalais, the Karunthamalais, the Nattam and the Alagar Hills, clusters round the village of Nattam. Their loftiest peak reaches an elevation of nearly 4400 feet. A sanitarium was planted on these hills also, in early times, but it has been abandoned on account of the malignant fever which infects the entire group. Among isolated rocks may be mentioned the precipitous fortress of Dindigal, and the Anemalai or 'Elephant Rock,' the Pasumalai or

'Cow Hill,' and the sacred Skandamalai—all three in the immediate neighbourhood of Madura town.

The principal river is the VAIGAI, which flows in a south-eastern direction from the hills to the sea, passing by the town of Madura, and dividing the District into two almost equal portions. Its chief tributaries are the Suruli, Varáhanadi, and Vattilla-gundu. The Gundu and Varshalái are the only other rivers worthy of mention. All these streams (the Vaigai included) are rather drainage channels than permanent rivers. In seasons of flood, when swollen by rains on the hills, they come down in impetuous torrents, filling their sandy beds from bank to bank. But for the rest of the year they dwindle into trickling streams, whose water is intercepted by frequent dams for irrigation before it reaches the sea.

The total area covered by hills and forests in Madura District is 1098 square miles, of which 306·5 square miles have been constituted Government forest reserves. The cultivated plain is bare of trees, except where a newly planted avenue marks the line of a main road. Groves of palmyra and cocoa-nut palms flourish along the sea-coast and the banks of the rivers. The summits of the hills are generally clothed with long grass, but valuable timber is found on the slopes of the Palní Hills, and in the Cumbum valley. Under the present system of forest conservancy, indiscriminate felling has been stopped, and forest trees grow in all the reserves. As many as 103 different kinds of ferns have been enumerated in different parts of the District; and among the wild products of the Palnis are gall-nuts, cardamoms, cinnamon, and pepper.

The wild animals of Madura are almost confined to the western hills, where the tiger, leopard, bear, elephant, bison, ibex, *sámbhar* deer, and packs of wild dogs are still to be found. The tiger has been nearly exterminated in recent years. Those occasionally seen are supposed to have wandered across the Travancore frontier. The *pálegár* dogs are a fine breed, very scarce, and difficult to obtain by purchase. Most of the other domestic animals — oxen, buffaloes, ponies, and sheep — are undersized and miserable creatures. The improvement of their breed is now receiving attention.

The predominant geological formation is granite, which is supposed to everywhere underlie the surface soil, and which crops up to the Palní Hills in the form of gneiss, quartz, and felspar. Syenite occurs in large boulders. A gravelly bed of laterite runs across the District, and is quarried for building purposes. Sandstone is said to extend along the whole length of the sea-coast. Mineral products include saltpetre and salt (which effloresce from the clay soils), lime, chalk, and graphite. Iron in various forms is found in all parts of the District. It is worked, though not very profitably, by the rude native processes in

Dindigal and in some other places. Gold is washed in some of the streams that flow down from the Palní Hills. Among precious stones are found several kinds of opal, chalcedony, jasper, garnet, and rock-crystal.

History.—Madura boasts a more ancient and continuous history than perhaps any other District of the Madras Presidency. Here was the capital of the Pándyan monarchy, commemorated by Greek geographers, which held its own from the earliest days until overthrown by the Muhammadan invader. Here, in later days, was the kingdom of the Náyaks, which extended its sway over all the surrounding Districts, and culminated in the glorious reign of Tirumala (1623-59). This same period saw the successful enterprise of the Jesuit missionaries, under their great leaders Robert de Nobilis and John de Britto. Subsequently, when the native dynasties of Southern India were falling to pieces on the dissolution of the Mughal Empire, Madura became the scene of continual warfare between the Muhammadans and the Maráthás, until it passed to the British in 1801.

The actual truth regarding the Pándyan period is obscured by the mists of sacred legends, but the existence of such a period is attested by a multiplicity of authorities. The author of the *Periplus* describes the whole Malabar coast as under 'King Pandion.' The Greek geographer Ptolemy, writing a century and a half after Christ, places 'Pandion' on the eastern side of Cape Comorin. Several rock-hewn inscriptions and copper-plate grants are still in existence to prove the names and attributes of some of the Pándyan kings. Local tradition is preserved in the *Madhura Sthala Purána*, a Sanskrit chronicle, to which Professor Wilson assigned a probable antiquity of 800 years. This curious document contains a considerable amount of information concerning the primitive doctrines of the Sivaite sect, and unquestionably embalms a few historical facts. The inductions of modern criticism seem to show that the Pándyas were established in Madura as early as the 5th century before our era, and that their empire lasted until the end of the 11th century A.D. The last of the line, named Sundara Pándya in the *Purána*, but known in Tamil legend as Kún Pándya, is said to have exterminated the Jains and conquered the neighbouring kingdom of Chola; but Sundara was in his turn overthrown by an invader from the north, who is plausibly conjectured to have been a Muhammadan. About 1324 a Musalmán army occupied Madura under the command of Málik Naib Káfur.

Madura District became a province of the great Hindu empire of Vijayanagar. Its history is confused and unimportant until the middle of the 16th century, when Viswanáth, the founder of the Náyak dynasty, was sent from Vijayanagar as ruler to Madura, accompanied by a famous general, Arya Náyak Muthali. Viswanáth was not only the

head of a line of prosperous kings, but also the originator of a sort of feudal system which gave all the local chieftains a place of honour and responsibility under the central authority. The city of Madura had 72 bastions; and each of these bastions was placed in charge of a particular chief, to whom a special tract of country was assigned on condition of military service. Such was the origin of the 72 *pálegárs* or *pálaiya-kárans* of Madura, some of whom have maintained their possessions to the present day. Viswanáth ruled at Madura from 1559 to 1563, and so consolidated his conquests that they passed peacefully to a long series of his descendants. The greatest of the line was Tirumala (1623–1659), whose magnificence and military exploits are recorded in the contemporary letters of the Jesuit missionaries. He adorned Madura with many public buildings, which still exist in tolerable preservation; and extended his empire over the adjoining Districts of Tinnevelli, Travancore, Coimbatore, Salem, and Trichinopoli. His gross revenue is estimated to have amounted to more than one million sterling, the greater part of which was derived from the crown lands. Emboldened by his prosperity, he threw off the nominal allegiance which his ancestors had always paid to the paramount Rájás of Vijayanagar, a step which brought him into collision with the more powerful, although more distant, Musalmán Sultán of Bijápur. The Muhammadans, after the lapse of many centuries, again invaded Madura, and compelled Tirumala to pay them tribute. The last days of the old king were gratified by a successful invasion of Mysore; but his policy of fomenting disunion among the Hindu Rájás was one of the chief causes which subsequently led to the predominance of the Musalmáns throughout Southern India.

After the death of Tirumala, the kingdom of Madura fell to pieces. Tanjore was overrun by the Maráthás under Ekojí, a brother of Sivají the Great; Mysore was consolidated by the ambitious policy of the Hindu Wadeyars, and afterwards by the usurper Haidar Alí; while Muhammadan influence steadily advanced southwards in the name of the Nawábs of the Karnátik. In 1740, Madura fell into the hands of Chanda Sáhib, and the line of the Náyaks was finally extinguished. During the next twenty years, the country became an easy prey to each successive band of invaders—Maráthá or Musalmán. In 1762, British officers took charge of the District, in trust for Wallah Jah, the last independent Nawáb of the Karnátik, who finally ceded his rights of sovereignty to the East India Company in 1801. The *táluk* of DINDIGAL had been captured from Mysore, after many military vicissitudes, in 1790.

The two large *zamíndárí* estates of RAMNAD and SIVAGANGA have a subordinate history of their own. The coast-line of Rámnád, forming the entire seaboard of the District, is the home of a race called

Marávars, who are supposed to be of aboriginal descent. Their chief, known as the Sethupati, is the hereditary guardian of the temple of Rámeswaram, an office which he claims to have received from the god Ráma. It would seem that he always owed allegiance to the Pándyan Rájás; but the ascertained history of the family begins in 1605, when a monarch of the Náyak line appointed the Sethupati to be the first of his 72 *pálegárs*. So long as the Náyak dynasty endured, they had no more faithful defenders than the Marávars of Rámnád.

Amid the general anarchy which followed on the death of King Tirumala in 1659, the Sethupati succeeded in maintaining the integrity of his ancestral dominions. But in the beginning of the 18th century, a succession of famines desolated the country. These were aggravated by internal dissensions; and in 1729, the kingdom of Rámnád was dismembered. Three-fifths were left to the legitimate heir, while two-fifths were assigned to a rebellious vassal, whose descendant now bears the title of Rájá of Sivagangá. In the early days of British rule, both these *zamíndárís* were centres of armed disaffection. They were for a long time notorious for neglected administration and backward agriculture, forming a marked contrast to those portions of the District held under the ordinary *ráyatwárí* tenure. The state of affairs of Sivagangá *zamíndárí* still remains unsatisfactory, owing to its distracted condition. The Rámnád estate has, under the management of the Court of Wards, improved satisfactorily in many ways; and its young Rájá is receiving a European education.

Population.—An enumeration, taken in 1850–51, returned the number of the people at 1,744,587. The general Census of 1871 disclosed a total population on an area corresponding to that of the present District (8401 square miles) of 2,266,615 persons. The next general Census of 1881 returned a population of 2,168,680, residing in 10 towns and 3961 villages, and in 395,096 houses; number of occupied houses, 56,324. The total area, taken at 8401 square miles, gave the following averages:—Persons per square mile, 258; villages per square mile, 0·47; average number of persons per village, 546; occupied houses per square mile, 47; persons per occupied house, 5·5—the average for the Presidency.

Classified according to sex, there were 1,032,707 males and 1,135,973 females; proportion of males, 47·6 per cent. Classified according to age, there were—under 15 years, 416,893 boys and 414,735 girls; total children, 831,628, or 38·3 per cent. of the population: above 15 years, males 615,716, and females 721,093; total adults, 1,336,809, or 61·6 per cent. of the population: not stated, males 98, females 145; total, 243. The religious division shows the following results:—Hindus, 1,942,820, or 89·59 per cent.;

Muhammadans, 140,948, or 6·5 per cent.; Christians, 84,900, or 3·9 per cent.; Buddhists and Jains, 9; and 'others,' 3. Since 1871 the Hindus have lost nearly 6 per cent., which the Muhammadans appear to have gained. The Christians have increased 19·6 per cent. The majority of the Hindus, in the proportion of 48 to 10, belong to the Sivaite as opposed to the Vishnuite sect. The Sivaites numbered (1881) 1,592,153, and the Vishnuites 332,616.

The Hindus include—Bráhmans (priestly caste), 42,555; Kshattriyas (warrior caste), 4123; Shetties (traders), 50,083; Vellálars (agriculturists), 498,014; Idaiyars (shepherds), 144,283; Kammálars (artisans), 75,971; Kannakans (writers), 318; Kaikalars (weavers), 85,261; Vanniyans (labourers), 478,595; Kushavans (potters), 25,541; Sátánis (mixed and depressed castes), 33,508; Shembadavans (fishermen), 118,659; Shánáns (toddy-drawers), 86,268; Ambattans (barbers), 33,675; Vannáns (washermen), 28,300; other outcastes and castes that follow no specified occupation, 237,666. As distributed into tribes, the Muhammadans include:—Arabs, 5; Labbais, 600; Mughals, 20; Patháns, 573; Sayyids, 33; Shaikhs, 114; and 'others,' 77,384. The Christians include 176 Europeans and 377 Eurasians; the remainder (84,347) represent native converts (67,365 of them Roman Catholics), who are more numerous than in any other District of Madras, except Tinnevelli.

The history of Christianity in Madura yet remains to be completely written.[1] In the beginning of the 17th century, we find a Jesuit church in Madura, where a Portuguese priest ministered to a poor congregation of fishermen, who had originally been converted by Francis Xavier. In 1606, Robert de Nobilis visited Madura, and his soul was at once fired with the ambition of becoming the apostle of the Hindus. Having previously obtained the consent of the Archbishop of Cranganore, he adopted the mode of life, diet, and garb of a *sanyásí* or religious devotee. A little rice, a little milk, and a few bitter herbs formed his single meal each day; a long yellow linen robe, a veil, a turban, and a pair of wooden sandals were his only dress. In token of his religion and caste, he wore a cross hung from his neck by five threads, three of gold to symbolize the Trinity, and two of silver to typify the soul and body of the Saviour. Shutting himself up in the strictest seclusion, in order to master the Tamil language, the fame of his sanctity was noised abroad. Gradually the people crowded round to learn who this strange teacher was, who gave out that he was no

[1] The rise and progress of Christianity in Southern India is narrated in Chapter ix. of article INDIA, volume vi. of the present work. The best account of the labours of the Society of Jesus in Madura will be found in the *Mémoires Historiques sur les Missions des Ordres Religieux* (1 vol. 2nd ed., Paris, 1862); and *La Mission du Maduré d'après des Documents Inédits* (3 vols., Paris, 1848, 1850, and 1854).

farangi or Portuguese, but a *guru* from Rome, 'meditating upon God.' The success of his plan was very great.

Men began by wondering at his asceticism, the profundity of his learning, the purity of his Tamil accent, the subtlety of his intellect. They ended by becoming converts to his teaching, which allowed them to retain not a few of the ceremonial observances of Hinduism. It is currently said that the great king, Tirumala Náyak, heard him favourably. After labouring for about forty years, Robert de Nobilis died in 1660 in a village near Madras, in the same state of perfect poverty as he had always lived. He left behind him a number of religious works, written in Tamil on palm leaves. His greatest successor was John de Britto, a Portuguese of illustrious birth and high education, who devoted himself to the civilisation of the wild tribe of Marávars. He was martyred in 1693, by order of the Sethupati. The last and most learned of the Madura Jesuits was Beschi, who compiled the first Tamil grammar, and whose Tamil writings are regarded by native *pandits* as the high-water mark of their literature. In the time of Robert de Nobilis the native converts were estimated at more than one million souls.

The Roman Catholics of Madura in 1881 numbered 67,554, and are under the charge of two missions—the Jesuits, and the Church of Goa. The former maintain 14 European and 3 Native priests, who perform service in 341 chapels throughout the District. The annual expenditure is said to amount to only £2500 a year, derived from the parent society. The Protestant cause is ably represented by an American mission, first established at Madura in 1834. In 1866 they had ten stations, each under the charge of a missionary, usually assisted by his wife. In that year there were 2439 baptized converts and 1164 communicants. In 1883 they had 11 stations, with 5973 baptized converts and 2886 communicants. The annual expenditure is about £8000. The chief success of the Protestants lies in their schools.

The three characteristic castes, or rather tribes, among the Hindus of Madura District are the Vellálars, the Marávars, and the Kallars. The Vellálars (498,014) are the most numerous and the most respected class of agriculturists. They are traditionally believed to be foreign immigrants, introduced into the country by the Pándya dynasty; but they speak a pure Tamil dialect, and there is no reason to doubt that they belong to a Dravidian stock. Under native rule, they were feudal landlords, cultivating their estates by means of predial serfs. They are the yeomen of this part of India. Their religion is a strict form of Siva-worship. The Marávars and Kallars (the Colleries of Orme) together make up the Vannians (478,595). The Marávars chiefly inhabit the two *zamíndárí* estates bordering the sea-coast. By their physical appearance, not less than by their superstitious practices, they reveal

their aboriginal descent. Their hereditary chiefs are the Rájás of Rámnád and Sivagangá. In early times they were renowned as bold warriors, and they have more than once risen against British authority. They follow the Dravidian custom of burying their dead and allowing the remarriage of widows. The Kallars are a tribe of professional robbers, whose head-quarters are in the tributary State of Pudukota.

In Orme, the Kallars appear as 'the Colleries,' whose lawless spirit and personal bravery repeatedly led to sanguinary rebellions against the British officers of the District. Their ethnical affinities are unknown. Their only religion is a debased form of demon-worship. Among their distinctive practices are polyandry and circumcision. Externally, they may be known by the singular fashion in which they distend the lobe of the ear.

Until the British rule, the District was constantly liable to disturbances from the rival caste-factions of the 'Hands.' The beginnings of the faction are obscure, but there is no doubt that the influence of the right-hand and left-hand caste division was long felt within the District. The right-hand faction comprised many of the more respectable castes, assisted by the Pariahs or outcastes who called their patrons the Valángei (right hand) friends. The left-hand faction or Idangei (= left hand) comprised the five sorts of smiths, the leather-workers, and similar artisan castes. Bráhmans and Muhammadans stood neutral. The collisions between the rival factions were often sudden, desperate, and destructive. In Madura, the women of the Chakkili caste, or leather-workers, are said to belong to the left hand, their husbands to the right hand. When a feud between the factions is in progress, all intercourse, it is said, ceases between husband and wife.

The principal towns in the District are—MADURA CITY, population (1881) 73,807; DINDIGAL, 14,182; PALNI, 12,974; KILAKARAI, 11,887; RAMNAD, 10,519; ARUPPAKOTAI, 10,831; PERIYAKULAM, 16,446; DEVIKOTA, 8451; PARMAGUDI, 9287; TIRUMANGALAM, 5480; and SIVAGANGA, 8343. The only municipalities are Madura and Dindigal, which had in 1883–84 an aggregate municipal income of £6645; the rate of taxation being 1s. 0¾d. per head in Madura, and 10d. in Dindigal.

The Census of 1881 distributes the male population into six main groups:—(1) Professional class, including State officials of every kind, and members of the learned professions, 19,402; (2) domestic servants, inn and lodging-house keepers, 4464; (3) commercial class, including bankers, merchants, carriers, etc., 17,000; (4) agricultural and pastoral class, including shepherds, 495,972; (5) industrial class, including all manufacturers and artisans, 104,209; and (6) indefinite and non-productive class, comprising labourers, male children, and per-

sons of unspecified occupation, 391,660. The unoccupied population is returned at 41·25 of the whole, which is 4 per cent. less than the Presidency average. Very little immigration or emigration takes place; 97 per cent. of the population in 1881 were born in the District.

Of the 10 towns and 3961 villages within the District, 2055 in 1881 contained less than two hundred inhabitants; 867 from two to five hundred; 518 from five hundred to one thousand; 303 from one to two thousand; 112 from two to three thousand; 78 from three to five thousand; 27 from five to ten thousand; 9 from ten to fifteen thousand; 1 from fifteen to twenty thousand; and 1 upwards of fifty thousand.

Agriculture.—The total area of Madura District is returned at 8401 square miles, of which, in 1882, 3663 square miles, or 43·6 per cent., belong to the two great *zamíndárís* or permanently assessed estates of Rámnád and Sivagangá, paying a revenue to Government of £57,264. *Inám* or grants held revenue-free, or at a low quit-rent, included in the same year 340 square miles, or 217,899 acres, of which 177 square miles, or 113,034 acres, were under cultivation, including 3474 acres bearing two crops; about the seventh part being irrigated. The total area of the *ráyatwárí* or Government village lands under occupation in 1882–83 was 1,729,388 acres. The area of both Government and *inám* lands actually cultivated in that year was 917,776 acres; the total assessment was £238,683. Of this amount, about 185,800 acres (including land bearing two crops) were irrigated, and about 731,500 acres unirrigated. The chief food crops are rice (Oryza sativa), *cholam* (Sorghum vulgare), *kambu* (Holcus spicatus), *ragí* (Eleusine corocana), *varagu* (Pennisetum typhoideum), *samai* (Panicum miliare), and several kinds of pulses. Other crops include oil-seeds, tobacco of excellent quality, grown in the neighbourhood of Dindigal, and a little indigo and cotton.

No fewer than 29 different varieties of rice are enumerated, which differ from one another considerably in respect of productiveness, rapidity of growth, and quality of grain. The three most extensively sown are *sambá*, *milagi*, and *sirumanain*. Rice can be grown on almost every description of land, provided that a constant supply of water is obtainable, sufficient to cover the ground to a depth of 2 inches. In a favourable year, the ploughing is done in the months of June and July after the early rains; the seed is sown in nurseries by the beginning of August; after about thirty days, the seedlings are ready for transplanting; in January, February, and March, the crop is reaped. The principal harvest of the year is called *kálam*. A second crop of rice or inferior grains is sometimes obtained from the same field.

Rice is, however, the diet only of the rich. The staple food supply

of the mass of the people is derived from the 'dry grains,' *i.e.* those which need no irrigation. These are pounded, and eaten in the form of a thin porridge, with any condiment that can be got. In 1882-83, of the 917,776 acres under actual cultivation, cereals occupied 681,587 acres, of which only 142 were under wheat; *ragí*, 106,150 acres; rice, 134,373 acres; and millets much the greater part of the rest. Pulses, including gram, peas, lentils, etc., occupied 86,563 acres; orchard and garden produce, 11,391; tobacco, 2805; coffee, 1987; chillies and other spices, 4563; sugar-cane, 952; starches, 831; rape-seed and other oil-seeds, 67,229; indigo, 342; and cotton, 59,374. Prices of produce in the same year ranged as follows per *maund* (80 lbs.):—Rice, 4s. 10d.; *ragí*, 2s. $3\frac{1}{2}$d.; millets, 2s. $1\frac{1}{2}$d. to 2s. $4\frac{1}{2}$d.; wheat, 7s. $9\frac{3}{4}$d.; gram, 2s. 3d.; salt, 5s. 9d.; sugar, 9s. 9d.; oil-seeds, 3s. 8d.; cotton, 18s. $2\frac{1}{2}$d.; and tobacco, 5s. 6d.

The agricultural stock of the District of Madura was as follows:—Horned cattle, 504,267, including 227,917 cows; sheep, 310,736; goats, 219,565; donkeys, 7919; pigs, 5950; horses, 115; and ponies, 3199: ploughs, 126,494; carts, 17,738; and boats, 7. Skilled labour earns from 1s. to 1s. 4d.; unskilled, from $5\frac{1}{4}$d. to 7d.

As regards tenures, the lands of the District may be divided into two classes—(1) Lands paying tax to Government, and (2) lands not paying tax to Government. Most of the lands in class (1) are held on a *ráyatwárí* tenure, under which tax is paid immediately to a Governmental officer without the intervention of a middleman of any sort.

The rainfall of Madura is small in amount and variable in its seasons. Every possible means of storing up the surplus waters has been resorted to from time immemorial. All the hill streams, and especially the Vaigai, are crossed by frequent anicuts or dams, which lead off the flood water into storage tanks, whence it is distributed over the fields with the utmost care and ingenuity. Some of these tanks are very large, and capable of supplying many hundred acres in a favourable year. That at Rájá-singh-mangalam, in the north of Rámnád, is said to be 20 miles in circumference. Unfortunately, many have been suffered to fall out of repair, especially in the coast *zamíndárís*. The restoration of these works has recently been undertaken, and is being vigorously prosecuted. An important engineering project, known as the Periyár Scheme, has long been under consideration, by which the abundant rainfall on the farther slope of the Travancore Hills would be diverted by a cutting or tunnel into the drainage basin of the Vaigai.

Natural Calamities.—In the famine period of 1876-78, Madura District was situated on the southernmost limit of distress. The deltaic rice tract of Tanjore was secure from scarcity; the southern angle of Tinnevelli was also comparatively free, while the northern hilly Districts of Salem and Coimbatore were severely afflicted. In

Madura itself about 60,000 persons, or nearly 3 per cent. of the population, were in receipt of relief in August 1877, when the famine was at its height. The South Indian line of railway, then recently opened, did invaluable service by bringing rice from the port of Tuticorin.

Manufactures, etc.—With the exception of salt, which is manufactured at certain stations on the sea-coast by solar evaporation as a Government monopoly, the industries of Madura are insignificant. Handsome turbans fringed with gold cloth, and a peculiar kind of red cloth, are specialities of Madura town. Turbans, also, and coarse chintz are woven at Dindigal. Piece-goods, cotton twist, earthenware, and brass vessels are made all over the District, in sufficient quantities to leave a surplus for exportation. The saltpetre trade is languishing; and the iron-ores, though abundant, have been little utilized. A considerable traffic is carried on by sea in native craft, though the inhospitable coast-line is destitute of a single good harbour. By far the greater share of the foreign trade is carried on with Ceylon. The principal exports from the District are rice and other grains, dregs of gingelly oil, spices, piece-goods, salt fish, red ochre, and earthenware. Tobacco is despatched by land from Dindigal in large quantities to be made up into Trichinopoli cheroots.

The average annual value of the total trade of the four ports (Kílákarai, Devípatam, Pambam, and Tóndi) of Madura District, exclusive of Government stores and Government treasure, for the five years ending 1882–83 was—imports, £107,046; exports, £73,485: total, £180,531. The average annual value of the foreign trade, during these years, was—imports, £20,739; exports, £50,215: total, £70,954. The average annual value of the coasting trade, during the same period, was—imports, £86,307; exports, £23,270: total, £109,577. In 1882–83, the total trade was—imports, £62,000; exports, £46,428: total, £108,428. The foreign trade was—imports, £23,456; exports, £31,291: total, £54,747. The coasting trade was—imports, £38,544; exports, £15,137: total, £53,681. The average annual number of ships which entered and cleared the four ports of Madura District for the five years ending 1882–83 was—6618 of 314,119 tons, of which 32 were steamers of 9632 tons. In 1882–83, the number of vessels which entered and cleared the same ports was—6287 of 264,417 tons, of which 72 were steamers of 10,017 tons.

Communications.—In 1882, there were 1125 miles of made road in the District, and 78 of railway. There are no navigable rivers or canals. The chief means of internal communication is the South Indian Railway, which runs across the District in a northerly direction from Tinnevelli to Trichinopoli. During the famine of 1877–78, this little narrow-gauge line proved of inestimable service.

Administration.—In the year 1882–83, the total imperial revenue of Madura District amounted to £306,454, of which the chief item was the land revenue, £248,969. Other chief items are the salt duty, *abkari* or excise duty, court fees, and stamps duty. In 1882, the incidence of taxation on each inhabitant was—land revenue, 2s. 3½d. per head; excise, 2d.; opium, ⅜d.; salt, 9½d.; stamps, 4⅛d.; miscellaneous, ¾d.—total per head, 3s. 8¼d. In the famine year (1876–77) the revenue had fallen, under the influence of the famine, to £269,218, being a decrease of 31 per cent. under the revenue of the preceding year. Thirty-seven officials, including a District Magistrate and Collector, carry on the civil, criminal, and revenue administration. The District magistrate is assisted by 4 divisional magistrates. The maximum distance by which any village is separated from the nearest court is 20 miles; average distance, 10 miles. The aggregate municipal income of Madura and Dindigal towns, in 1883–84, was £6645. In 1882, the daily average number of prisoners in the District jail was 262·8, of whom 11·2 were women. The total expenditure was £1556, or £5, 18s. 4d. per prisoner. The total police strength of the District in 1882 was 1130 men, and the total cost £18,537. Comparing these figures with those of area and population, there is one policeman to every 7·7 square miles and to every 1982 persons.

Education has made rapid progress in recent years. In 1857 there was only 1 school in the District, attended by 163 pupils. By 1867, the number of schools had risen to 65, with 2330 pupils. In that year, 48 candidates went up for the matriculation examination of the Madras University, of whom 16 passed. The educational statistics for 1881–82 show a total of 1076 Government or inspected schools and 26,445 pupils, being 1 school to every 7·8 square miles, and 12 pupils to every thousand of the population. Forty-one of the whole number are girls' schools with 1195 pupils; and one is a normal school with 51 pupils. There is also an Arts College with 41 students. The Census Report of 1881 returned 41,263 boys and 1617 girls as under instruction, besides 134,091 males and 4561 females able to read and write, but not under instruction, in Madura District.

The language of the District is Tamil, with a little Kánarese spoken on the western boundary. English is now understood by a considerable number of natives in the town of Madura. There are seven printing-presses in the District—two in native hands, and the press belonging to the American Mission, who publish a fortnightly Tamil newspaper called the *Sattiavartamani.*

Medical Aspects.—The climate of Madura is described as hot, dry, and variable. Its characteristics are, that there is no regular cold season, and that the scanty rainfall is distributed over the greater part of the year. During the 20 years ending 1881, the average rainfall

was 31·7 inches, of which 8·7 inches were brought by the south-west or early monsoon, and 14·8 inches by the north-east monsoon, which usually breaks in October. In 1882, the rainfall was 32·06 inches; the year previous it had been as much as 44 inches. The months from December to February are the coolest in the year, being marked by heavy dews at night and fogs in the morning and evening. Along the sea-coast the sultriness of the hot season is tempered by sea-breezes. The maximum temperature in the shade in 1882 was 105·6° F., and the minimum 64·4° F. The climate on the Palní Hills resembles the 'half-English air' of the Nílgiris.

The District cannot be termed healthy, at least for natives. Besides the usual diseases of India, Madura suffers from three special scourges—endemic fever, which sometimes rages with exceptional severity, as when it burst over Coimbatore, Madura, and Tinnevelli in the fatal years 1810 and 1811; cholera, disseminated by pilgrims to the sacred temple at Rámeswaram; and the well-known 'Madura foot.' This last complaint, known to science as *Morbus pedis entophyticus*, is a species of fungus, which spreads over the whole foot in a mass of tubercles. Its primary local cause seems unknown. One theory would assign it to the effect of a black cotton soil; and a case in all respects similar to the cases in Madura is represented as having occurred in Gujarát. The registration of deaths is by no means trustworthy. The returns for 1882 show a death-rate of only 16·3 per thousand, which is probably about one-half of the actual truth. The birth-rate per thousand in the same year was 28·6. There were in 1882, 23 dispensaries in the District, with average daily attendances ranging from 5 to 236·4. At these dispensaries 2597 in-door patients were treated during the year. The municipal dispensary at Madura town gave relief in 1882–83 to a total of 31,573 patients, of whom 698 were in-door patients. The American Mission maintains two dispensaries at Madura and Dindigal, aided from municipal and local funds. The Madura municipal hospital cost, for the year, £1277. [For further information regarding Madura District, see *The Madura Country*, by J. H. Nelson, M.A. (Madras, 1868); the *Madras Census Reports* for 1871 and 1881; and the several Madras Administration and Departmental Reports up to 1884.]

Madura.—*Táluk* of Madura District, Madras Presidency. Area, 335 square miles. Population (1881) 215,333, namely, males 104,850, and females 110,483. There are 1 town and 273 villages in the *táluk*; occupied houses, 35,454. Hindus numbered 199,702, or 92·7 per cent.; Muhammadans, 11,353; Christians, 4276; and 'others,' 2. In 1883 there were, including the District head-quarters courts, 5 civil and 6 criminal courts; police stations, 9; regular police, 335 men. Land revenue, £21,637.

Madura (*Mad'hurá*).—Chief town of Madura District, Madras

Presidency; situated on the south bank of the Vaigai river, 38 miles by road south-south-east of Dindigal. Lat. 9° 55′ 16″ N., long. 78° 9′ 44″ E. According to the Census of 1881, Madura is the third most populous town in the Presidency, and has a total population of 73,807 persons, of whom 37,238 are males and 36,569 females, dwelling in 10,324 houses. Hindus numbered 64,823; Muhammadans, 6701; Christians, 2281; and 'others,' 2.

Madura town was constituted a municipality as early as 1865, and has shared in the development given to municipal institutions by more recent Madras Acts. In 1883–84, the municipal income from taxation, excluding imperial licences, amounted to £5642. The incidence of taxation was 1s. 0¾d. per head within the municipal limits of Madura town.

The history of the town is included in that already given for the District. From time immemorial, Madura has been both the political and religious capital of the extreme South. Its traditional line of Pándyan kings dates back beyond the Christian era; and in historical times, it was the chosen residence of the powerful monarch Tirumala Náyak, to whom all its architectural glories are assigned. The foundation of the city and the sanctity of the great pagoda are described at length in the *Madhurá Sthala Purána*, with the usual amplifications of Bráhmanical legend. In conjunction with the temple at Rámeswaram, it is honoured by the personal presence of the great god Siva, whose worship is predominant in Southern India, to the exclusion of the other two members of the Hindu Trinity. At the present time, the two most sacred shrines in the pagoda are those of Sundareswara and his wife Minákshi.

In the first half of the 14th century, Madura was overrun by Muhammadan invaders, who persecuted the Hindus with cruel severity, and sentenced the great pagoda of the city to destruction. They pulled down the outer wall with its 14 towers, and levelled the numerous buildings which always cluster round a native temple. But the two inmost shrines were miraculously preserved; and on the expulsion of the Musalmáns, the priests of Siva regained their revenues, and rebuilt the four lofty *gopurás* or gateways which now stand in the outer wall. The Madura pagoda has been elaborately described by Fergusson (*History of Indian Architecture*). It forms a parallelogram, 847 feet long from north to south, by 744 feet broad, surrounded by 9 *gopurás* in all, one of which is 152 feet high. The principal structure is the *Sahasra-stambha-mantapam*, or 'Hall of One Thousand Pillars' (the actual number being 997), which was built by Arya Náyak or Náik Muthali, the general and minister of Viswanáth, the founder of the Náyak dynasty (*circ.* 1550). The whole is profusely ornamented both with sculptures and paintings.

The other great buildings of Madura are all associated with the name of Tirumala Náyak, who reigned from 1623 to 1659. The chief of these is the celebrated palace, the most perfect relic of secular architecture in the Madras Presidency. Its ruins cover a vast area of ground, and have been utilized at one time or another by successive administrations. The Collector's office was in one of the detached buildings, but has now been located in the palace, towards the restoration of which the British Government has devoted a large sum of money. The main structure consists of two parts, an open court and a lofty hall. The style of architecture is a mixture of the Hindu and the Saracenic; but, as in the Muhammadan capitals of Northern India, a fanciful tradition relates that the native workmen were directed by a European master. The courtyard is approximately 100 yards square, with high walls of brick, forming long galleries surmounted by domes. One side is constituted a hall; and its lofty domed roof is supported by circular pillars of granite, thickly coated with *chunam* or lime, and destitute of ornament. The central area is said to have been the scene of gladiatorial exhibitions. The other hall is of smaller dimensions, being about 90 feet by 40 feet. It is covered by a pointed-arch roof of brick, which is strengthened by granite ribs springing from columns at the sides.

Only second in importance to the palace is the Vasanta or Puthu *mantapam*, still in complete preservation. This is said to have been built as a summer retreat for the god Sundareswara. It consists of a hall about 100 yards long by 30 yards wide. In this case the roof is flat, being composed of long slabs of granite, resting upon four rows of pillars, each 20 feet high, and numbering 124 in all. The whole is profusely ornamented with the characteristic emblems of the Hindu religion, carved in high relief. In addition, there are ten groups of sculptured effigies, some colossal and some small, representing Tirumala and his nine predecessors, with their wives. On the farther bank of the Vaigai stands the Tamakam, a two-storied building of quaint architecture, said to have been erected as a kind of grand-stand, from which to view spectacular combats. Lastly, the Teppu-kulam or great tank, about a mile and a half east of the town, is also assigned to the time of Tirumala. The tank is a perfect square, each side measuring 1200 yards (Nelson). The banks are faced with hewn granite, and surmounted with a handsome parapet, also of granite, beneath which runs a continuous paved gallery. In the centre rises a square island, with a lofty domed temple in the middle and a tiny shrine at each corner. Once a year the banks of this tank are illuminated with a *lákh* (100,000) of lamps; while the idols from the pagoda are drawn round in a *teppam* or raft, from which the tank takes its name. The tank always contains water (except in the famine year of 1877), and

its neighbourhood is the favourite resort of European residents for an evening drive.

Under British rule, the town of Madura has been greatly improved by the laying out of wide streets and market-places. A large sum of money has been expended, although not with complete success, to obtain a constant supply of water from the Vaigai. The chief modern buildings are—the new jail; the civil and lying-in hospitals, standing on a ruined gateway, which is all that remains of the old fort; the District school-house, founded in 1856. The Jesuits, who were established in Madura by the beginning of the 17th century, have several churches in the town, and a small dispensary. The American Protestant Mission, dating from 1834, possess a boarding-school and a very useful hospital. The municipality also maintains 8 elementary schools, with accommodation for 550 pupils. The hospital, with a lying-in department attached, was attended in 1882–83 by 698 in-door and 30,875 out-door patients. Madura is an important station on the South Indian Railway.

Madurá.—River in Cachar District, Assam; tributary to the Bárak on its north or right bank. It takes its rise in the North Cachar Hills, where it is known as the Bongpai. A popular legend in connection with this river relates how a former Rájá of Cachar, who had lost his throne, was told in a dream that if he went to the Madurá river the next day he would see something approaching him against the current, which he was to seize. On proceeding to the river the next morning, he saw a huge serpent swimming towards him against the stream. This he seized by the tail, whereupon it was transformed into a sword, by the aid of which he succeeded in regaining his kingdom. The sword was

some time, we proceeded round the swamp to the temple, where the priest had spread carpets for the party under the shade of some trees. They told me it was a curious sight to see the crocodiles fed, and that people of rank always gave them a goat for that purpose. Taking the hint, I immediately ordered one to be killed for their entertainment.

'The animal was slaughtered on the edge of the swamp; and the instant the blood began to flow, the water became perfectly alive with

Madurántakam.—*Táluk* in Chengalpat (Chingleput) District, Madras Presidency. Area, 696 square miles. Population (1881) 223,067, namely, 112,239 males and 110,828 females. There are 525 villages; occupied houses, 30,725. Hindus number 215,422; Muhammadans, 3444; Christians, 4199; and 'others,' 2. In 1883, the *táluk* contained 2 criminal courts; police stations (*thánás*), 11; regular police, 80 men. Land revenue, £41,138. The *táluk* is fairly fertile; the principal crop is rice on 'wet' lands, and on 'dry,' other cereals. The Yedakeinád or 'left-hand land,' a strip of land along the coast, separated from the mainland by backwaters, grows excellent cocoanuts. The Kiliyár and Palár run through the region.

Mafúz Bandar.—Town in Ganjám District, Madras Presidency.—*See* CHICACOLE.

Magadi.—*Táluk* in Bangalore District, Mysore State. Area, about 320 square miles, of which 119 are cultivated. Population (1881) 49,882, namely, 47,304 Hindus, 2573 Muhammadans, and 5 Christians. Males numbered 24,581, and females 25,301. Revenue (1883), £10,566. The Arkavati runs through the south-eastern portion, but cultivation gains little benefit from its waters. The highest peak is SAVANDRUG (4024 feet above the sea), offering a strong position, and occupied by the remains of a hill fort. Bairandrúg, another hill of considerable elevation, was formerly fortified. The soil is a shallow red mould, mixed with stones. Crops—*ragí*, gram, *avare*, *togari*, and tobacco. The *táluk* contains 1 criminal court; police stations (*thánás*), 7; regular police, 59 men; village watchmen (*chaukídárs*), 71. The Chola dynasty, the kings of Vijayanagar, and the Gauda chiefs of Bangalore, successively held sway over the *táluk*.

Magadi. — Village in Bangalore District, Mysore State; headquarters of the Magadi *táluk*; situated in lat. 12° 57′ 20″ N., and long. 77° 16′ 10″ E.; 28 miles by road west of Bangalore city. Population (1881) 3078. Said to have been founded in 1139 by a Chola king. In the 16th century it passed into the hands of Immadi Kempe Gauda of Bangalore, who fixed his residence here. In 1728 it was captured by the Hindu Rájá of Mysore, and the chief was carried prisoner to Seringapatam, where he died. The fort is now deserted, the town being built on a slope to the north. The ruined temple of Sameswara was erected by Kempe Gauda.

The whole is profusely ornamented with the characteristic emblems of the Hindu religion, carved in high relief. In addition, there are ten groups of sculptured effigies, some colossal and some small, representing Tirumala and his nine predecessors, with their wives. On the farther bank of the Vaigai stands the Tamakam, a two-storied building of quaint architecture, said to have been erected as a kind of grand-stand, from

Magar Taláo (*Crocodile Tank*, also called *Magar Pír*, or more correctly, *Pír Mangho*).—Tank, hot springs, and temple in Karáchi (Kurrachee) District, Sind, Bombay Presidency; situated about 7 or 8 miles north of Karáchi city, among very barren and rocky hills. Lat. 24° 58′ N., long. 67° 5′ E. The following description of this curious place is by Carless, who visited the spot many years ago, but whose account applies, with but few exceptions, to its appearance at the present day:—

'We came suddenly upon one of the most singular scenes I ever witnessed. The accounts of my companions had prepared me for something extraordinary, but the reality far surpassed their description.

Before us lay a small swamp enclosed in a belt of lofty trees, which had evidently been formed by the superfluous waters of the spring close by flowing into a low hollow in the ground. It was not a single sheet of water, but was full of small islets, so much so that it appeared as if an immense number of narrow channels had been cut, so as to cross each other in every direction. These channels were literally swarming with crocodiles, and the islets and banks were covered with them also.

'The swamp is not more than 150 yards long, by about 80 yards broad; and in this confined space I counted above 200 large ones, from 8 to 15 feet long, while those of a smaller size were innumerable. Our horses were standing within 4 or 5 yards of several reclining on the bank, but they took no notice of them, and would not move until roused by a stick. In a small pool, apart from the swamp, there was a very large one, which the people designate the "chief," because he lives by himself in a kind of state, and will not allow any of the common herd to intrude upon his favourite haunt. It is worthy of remark, that there were several buffaloes standing in the water in the centre of the swamp, and that though the large crocodiles frequently came in contact with them in swimming past, they never offered them the least molestation. The natives say they never touch a buffalo, but will instantly attack any other animal, however large. The appearance of the place altogether, with its green, slimy, stagnant waters, and so many of these huge, uncouth monsters moving sluggishly about, is disgusting in the extreme; and it will long be remembered by me as the most loathsome spot I ever beheld. After gazing upon the scene some time, we proceeded round the swamp to the temple, where the priest had spread carpets for the party under the shade of some trees. They told me it was a curious sight to see the crocodiles fed, and that people of rank always gave them a goat for that purpose. Taking the hint, I immediately ordered one to be killed for their entertainment.

'The animal was slaughtered on the edge of the swamp; and the instant the blood began to flow, the water became perfectly alive with the brutes, all hastening from different parts towards the spot. In the course of a few minutes, and long before the goat was cut up, upwards of 150 had collected in a mass on the dry bank, waiting with distended jaws until their anticipated feast was ready. We stood within 3 yards of them, and if one more daring than the rest showed any desire to approach nearer, he was beaten back by the children with sticks. Indeed they were so sluggish, and if I may use the expression, tame, that I laid hold of one, about 12 feet long, by his tail, which I took care, however, protruded to a safe distance beyond the mass. When the meat was thrown among them, it proved the signal for a general battle; several seized hold of a piece at the same time, and bit and

struggled and rolled over each other until almost exhausted with the desperate efforts they made to carry it off. At last all was devoured, and they retired slowly to the water. . . .

'The mosque is a neat white building, of a square form, surrounded by a broad terrace, with a cupola and slender minarets at the corners, erected on the summit of a rocky crag of limestone, and said to be 2000 years old. It is dedicated to Pír Haji Mangho, who is esteemed a saint by both Hindus and Muhammadans, and is held in such high veneration throughout Sind, that numbers of bodies are yearly brought from a great distance to be interred near his shrine. The valley is, in consequence, covered with burying-grounds, which are full of tombs, elaborately carved and ornamented.

'The interior of the mosque contains a tomb surmounted by a canopy of carved woodwork supported on slender pillars, the whole prettily and neatly ornamented, and kept in excellent order, as are the building and terrace, which are built of stone. On the side of the rock looking towards the crocodiles' pool, the perpendicular face of the cliff is covered with a coating of smooth *chunam*, and from the lower part the principal spring gushes forth through a small fissure. The water is received into two stone reservoirs, and then escapes through several outlets to the swamp below. In one of them was a large crocodile, with about a dozen young ones, which the inhabitants have named the "Peacock" (or Mor), and they consider him to be the progenitor of the whole race. The water of this spring is perfectly fresh and slightly warm, but at another, a few yards from it, it is quite cold.

'On leaving the temple, we crossed the valley towards the salt spring, which is situated on the eastern side at the base of a narrow ridge of sandstone about 600 feet high. The water is extremely salt, and, after forming two or three small pools, escapes in several streams, swarming with small crocodiles, through an opening in the ridge, and is absorbed in the sandy plain on the other side. The natives say the water in the pools sometimes rises and falls, and they attribute this to the influence of the ocean tides upon it; but this cannot be the true cause, as the rise only takes place at long intervals, and the plains, besides, ascend gradually from the sea up to the spot, which I estimated to be about 150 feet above its level. That there is a considerable rise in the water at times is evident from the extent of ground about the spring which has been overflowed, and which is covered with a saline incrustation to the depth of 2 or 3 inches; and it is probably produced merely by a sudden increase in the body of water issuing from it, caused by a heavy fall of rain among the mountains in the vicinity.'

The temperature of the water of the hot springs is 133° F. The springs are considered by the natives to be efficacious in the cure of every disease, and many bathe daily in the waters. Picnics are

held under *tálukdári*, 11 under *zamíndári*, and 8 under *pattidári* tenure.

Mágurá.—Sub-division of Jessor District, Bengal, lying between 23° 15′ 30″ and 23° 41′ N. lat., and between 89° 17′ 30″ and 89° 43′ 30″ E. long. Area, 425 square miles; villages, 877; occupied houses, 43,339. Population (1872) 275,720; (1881) 293,303, namely, males 143,463, and females 151,840. Total increase during nine years, 17,583, or 6·38 per cent. Classified according to religion, there were in 1881—Muhammadans, 162,534; Hindus, 130,730; and Christians, 39. Persons per square mile, 690; villages per square mile, 2·06; houses per square mile, 104; persons per house, 6·7; proportion of males to total population, 48·9. This Sub-division contains (1883) 2 magisterial and 2 revenue and civil courts, with 3 police stations at Mágurá, Muhammadpur, and Salikhá; a regular police force of 47 men, besides 558 village watchmen.

Mágurá.—Town in Jessor District, Bengal, and head-quarters of Mágurá Sub-division; situated in lat. 23° 29′ 25″ N., and long. 89° 28′ 5″ E., on the Nabagangá river, at the point where the Muchíkhálí brings down into it the waters of the Garái and Kumár. Brisk export of sugar, and import of rice. Sugar refineries. Extensive manufacture of reed mats is carried on; and oil is extracted from mustard seeds. The town is divided into two parts—Mágurá proper, with the *bázár*, and Darí Mágurá on the west. Protected from inundation by the Nabagangá embankment. Dispensary.

Mahábaleshwar.—Principal sanitarium of the Bombay Presidency; situated in lat. 17° 58′ 5″ N., and long. 73° 42′ 35″ E., in the Jauli Sub-division of Satára District. Mahábaleshwar occupies the prolonged, and in places almost level, summit of a range of the Western Gháts, from which it takes its name; with a general elevation of 4500 feet above sea-level, at points rising to 4700. It is reached from Bombay by the Great Indian Peninsula Railway to Poona (119 miles), and thence by post-carriage or on horseback (74 miles) by good road, by the Katraj, Kamatki, and Pasarni *gháts*. Rest-houses are established along the route, and carriages can be driven right up the Pasarni *ghát*, although it is expedient to assist the horses by a dozen coolies, or to perform that stage by mules. A more recent route (opened March 1875) conveys travellers by steamboats from Bombay to Dasgáon, near the mouth of the Savitri river, from which an old road leads (35 miles) across the intermediate plain and up the *ghát* to Mahábaleshwar station. Permanent population, 3248 in February 1881.

Mahábaleshwar combines all the conditions requisite for a first-class sanitarium. Easy access for invalids from the great centres of Bombay and Poona, ample level space for carriage exercise at the top of the hill, an excellent water-supply, picturesque scenery, and proximity to

the fresh sea-breeze. It was established in 1828 by Sir John Malcolm, the Governor of Bombay, who obtained the site from the Rájá of Satára in exchange for another patch of territory. The founder's name still survives in the village of Malcolmpet. This name is sometimes applied to the whole station, comprising an area of 5 miles radius from the Frere Hall, and including the lands of sixty-five petty hamlets of from four to twenty huts each. The superior elevation of Mahábaleshwar (4500 feet) renders it much cooler than the rival sanitarium of Mátherán in Thána District (2460 feet), but its heavy rainfall makes it almost uninhabitable during the rainy season. The monsoon strikes this outlying range of the *gháts* with its full force, and deposits on their slopes the main portion of its aqueous burden.

Mahábaleshwar forms the retreat usually during spring, and occasionally in autumn, of the Governor of the Bombay Presidency, the Commander-in-Chief of the Bombay Army, and the chief officers of their head-quarters establishments. It is also a popular resort for visitors from Bombay and Poona and the surrounding Districts. The favourite season for visitors is from March to June, the object being to escape from the intense heat of the plains. But this is not the time of the year when Mahábaleshwar is most beautiful, as the streams and waterfalls are dry, the verdure parched, and the magnificent view obstructed by haze and glare. As soon as the first burst of the summer monsoon occurs, about June, the visitors, residents, and shopkeepers leave the station *en masse*, and only a few of the poorer classes remain. On the cessation of the monsoon in October, visitors return to Mahábaleshwar, which is then seen at its best. Beautiful ferns of many varieties are in full leaf, and many spots are completely carpeted with wild-flowers, moss, and grasses. The streams are at their fullest; the Yenna falls forming an imposing cascade, while the faces of the cliffs are lighted up with innumerable silver rills and dazzling sprays. Except during the south-west monsoon, Mahábaleshwar is at all times most attractive, one of its principal charms being the excellent drives and walks in all directions.

Mahábaleshwar proper is a municipality under the administrative charge of a Superintendent, almost always a member of the Bombay Medical Service. From the success attending the cultivation of cinchona on the Nílgiris and on some of the hill stations in Bengal, the Government of India in 1864 established a garden, consisting of about 95 acres, on the eastern side of the hill; but this experimental cultivation proving a complete failure, the land, with a bungalow erected thereon, was in 1876 handed over to the Forest Department. The experiment had cost £6400. Mahábaleshwar has the usual public buildings of a first-class sanitarium—church, clubs, library, hotels, cemetery, telegraph and post office, etc. The *bázár* or general market occupies a central

position in the station, and supplies of every description can be obtained. The Frere Hall, a handsome building, constructed in 1864, contains a large reading-room with a well-assorted library. The European residences consist of about 100 bungalows scattered over a radius of 3 or 4 miles, nearly all being occupied during the season. The population varies according to the time of the year; but the permanent population of the 65 villages comprising Malcolmpet, including Mahábaleshwar Hill, was returned in February 1881 at 3248. No returns are available showing the population at the height of the season. Municipal revenue (1882–83), £1510—including a subsidy from Government of £640. An excellent medical institution is presided over by the civil surgeon, who also acts as Superintendent of the station, and Assistant to the Collector at Satára.

The average annual mean temperature of Mahábaleshwar Hill is 66·8° F. In November, December, and January, the coldest months, the temperature averages 63·4°, rising to a mean of 67° in February, when the cold weather ends. The hottest time of the year is from about the middle of March to the middle of April, when during the day the temperature rises to a little over 90° F. Towards the end of April, invigorating sea-breezes set in from the west, which gather strength as the season advances. Occasional showers occur in May, and the monsoon usually sets in early in June, attaining its maximum force in July, when 12 inches or even more of rainfall are occasionally registered in a single day. During the twenty-four years ending 1884, the rainfall varied from 167·6 inches in 1877 to 374·5 inches in 1882, the yearly average being 263·8 inches.

Mahábalipur ('*The City of the Great Bali*'—'The Seven Pagodas;' the vernacular name is also spelt *Mahavellipur*, *Mavallipur*, *Mámalaipur*, *Mamallapur*, and *Mallapur*).—Village in Chengalpat (Chingleput) District, Madras; situated in lat. 12° 36′ 55″ N., and long. 80° 13′ 55″ E., 35 miles south of Madras. Population (1881) 987; number of houses, 148.

This is one of the most interesting and, to archæologists, one of the most important spots in Southern India. The dispute as to its name has been freely discussed in Major M. W. Carr's work on the 'Seven Pagodas,' and Mr. Crole's Manual of the District. It is a moot point, whether to the Malla family of the Chalukyas, or to Bali of legendary greatness, belongs the honour of naming these wonderful temples.

The antiquities of the place may be divided into three groups—(1) the 5 *raths* to the south of the village, belonging probably to the latest Buddhist period; (2) the cave temples, monolithic figures, carvings, and sculptures, west of the village, probably of the 6th or 7th century A.D. (these contain some marvellous reliefs, ranking with those of

Ellora and Elephanta); (3) the more modern temples of Vishnu and Siva, the latter being washed by the sea. To these two, with five other pagodas, buried (according to tradition) by the sea, the place owes its English name. The following selections from Crole, Fergusson, and Hunter, describe these antiquities. Mr. Crole writes:—

'The best, and by far the most important, of its class is the pastoral group in the Krishna *mantapam*, as it is called. The fact is, that it represents Indra, the god of the sky, supporting the clouds with his left hand, to protect the cattle of Bala from the fury of the Maruts or tempest demons. Near him, the cattle are being tended and milked. To the right, a young bull is seen, with head slightly turned and fore-foot extended, as if suddenly startled. This is one of the most spirited and lifelike pieces of sculpture to be seen anywhere.

'A little to the north of this is the great bas-relief which goes by the name of "Arjun's Penance." It covers a mass of rock 96 feet in length and 43 feet in height, and is described by Fergusson as "the most remarkable thing of its class in India." "Now," says he, "that it is known to be wholly devoted to serpent-worship, it acquires an interest it had not before, and opens a new chapter in Indian mythology. There seems nothing to enable us to fix its age with absolute certainty; it can hardly, however, be doubted that it is anterior to the 10th century, and may be a couple of centuries earlier." . . .

'Near the stone *choultry* by the side of the road, and a little to the north of the rock last described, stands a well-executed group lately exhumed, representing a couple of monkeys catching fleas on each other after the manner of their kind, while a young one is extracting nourishment from the female.

'Near this point, a spectator, looking southwards, may see, formed by the ridges on which the caves are cut, the recumbent figure of a man with his hands in the attitude of prayer or meditation. This figure measures at least 1500 feet long, the partly natural resemblance having been assisted by the rolling away of rocks and boulders. On the spot, this is called the "Giant Rájá Bali," but it is no doubt the work of Jains.

'The whole of this ridge is pitted with caves and temples. There are 14 or 15 Rishi caves in it, and much carving and figuring of a later period. These are distinguished by the marked transition from the representations of scenes of peace to scenes of battle, treading down of opposition and destruction, the too truthful emblems of the dark centuries of religious strife which preceded and followed the final expulsion of the Buddhists. Their age is not more than 600 or 700 years; and the art is poor, and shows as great a decadence in matter as in religion. The representations are too often gross and disgusting, and the carving stiff and unnatural—entirely wanting in ease and grace and truth to nature.

'Behind this ridge, and near the canal, are two more of the monolithic *raths*, and one similar in form, but built of large blocks of stone.

'The last period is represented by the Shore Temple, the Varáhaswámí Temple in the village, and by some of the remains in a village in a hamlet called Sálewankuppen, 2 miles to the northward. In the two former there is little distinguishable in construction and general plan from similar buildings to be found everywhere in the south.

'Looking at the place as a whole, its architecture, its sculptures, and its inscriptions, we would seem to possess here a complete religious history of the south carved in the imperishable rock; and, with all deference to the high authority of Mr. Fergusson (who, however, seems to have confined his study almost entirely to the monoliths), it is difficult to believe that the remains enumerated do not form a chapter in the story anterior to his earliest one, which he dates about the 6th century A.D. It would seem to be much more in accordance with the evidence to accept these remains as the records left by the Buddhist faith, and to assign to them an age nearly coeval with the zenith of Buddhist architecture and sculpture, or a period commencing a couple of centuries or so before the Christian era.'—(Crole.)

Mr. Fergusson writes:—

'The oldest and most interesting group of monuments are the so-called five *raths*, or monolithic temples, standing on the sea-shore. One of these, that with the apsidal termination, stands a little detached from the rest. The other four stand in a line north and south, and look as if they had been carved out of a single stone or rock, which originally, if that were so, must have been between 35 feet and 40 feet high at its southern end, sinking to half that height at its northern extremity, and its width diminishing in a like proportion.

'The first on the north is a mere *pansala* or cell, 11 feet square externally, and 16 feet high. It is the only one, too, that seems finished or nearly so, but it has no throne or image internally, from which we might guess its destination.

'The next is a small copy of the last to the southward, and measures 11 feet by 16 feet in plan, and 20 feet in height. The third is very remarkable; it is an oblong building with a curvilinear-shaped roof with a straight ridge. Its dimensions are 42 feet long, 25 feet wide, and 25 feet high. Externally it seems to have been completely carved, but internally only partially excavated, the works being apparently stopped by an accident. It is cracked completely through, so that daylight can be seen through it, and several masses of the rock have fallen to the ground. This has been ascribed to an earthquake and other causes. My impression is that the explanation is not far to

seek, but arose from unskilfulness on the part of workmen employed in a first attempt. Having completed the exterior, they set to work to excavate the interior, so as to make it resemble a structural building of the same class, leaving only such pillars and supports as were sufficient to support a wooden roof of the ordinary construction. In this instance, it was a mass of solid granite which, had the excavation been completed, would certainly have crushed the lower storey to powder. As it was, the builders seem to have taken the hint of the crack, and stopped the further progress of the works.

'The last, however, is the most interesting of the series. Its dimensions are 27 feet by 25 feet in plan, 34 feet in height. Its upper part is entirely finished with its sculptures, the lower merely blocked out. It may be that, frightened by the crack in the last-named *rath*, or from some other cause, they desisted, and it still remains in an unfinished state.

'The materials for fixing the age of this *rath* are, first, the palæographic form of the characters used in the numerous inscriptions with which it is covered. Comparing these with Prinsep's alphabets, allowing for difference of locality, they seem certainly to be anterior to the 7th century. The language, too, is Sanskrit, while all the Chola inscriptions of the 10th and subsequent centuries are in Támil, and in very much more modern characters. Another proof of antiquity is the character of the sculpture. We have on this *rath* most of the Hindu Pantheon, such as Bráhma and Vishnu; Siva, too, appears in most of his characters, but all in forms more subdued than to be found elsewhere. The one extravagance is that the gods have generally four arms—never more—to distinguish them from mortals; but none of the combinations or extravagances we find in the caves here, as at Ellora or Elephanta. It is the soberest and most reasonable version of the Hindu Pantheon yet discovered, and consequently one of the most interesting, as well, probably, as the earliest.

'None of the inscriptions on the *raths* have dates; but from the mention of the Pallavas in connection with this place, I see no reason for doubting the inference drawn by Sir Walter Elliot from their inscriptions—"that the excavations could not well have been made later than the 6th century." Add to all this, that these *raths* are certainly very like Buddhist buildings, and it seems hardly to admit of doubt that we have here petrifactions of the last forms of Buddhist architecture, and the first forms of that of the Dravidian.

'The want of interiors in these *raths* makes it sometimes difficult to make this as clear as it might be. We cannot, for instance, tell whether the apsidal *rath* was meant to reproduce a Chaitya hall, or *vihára*. From its being in several storeys, I would infer the latter; but the whole is so conventionalized by transplantation to the south, and by the

different uses to which they are applied for the purposes of a different religion, that we must not stretch analogies too far.

'There is one other *rath*, at some distance from the others, called "Arjun's Rath," which, strange to say, is finished, or nearly so, and gives a fair idea of the form their oblong temples took before we have any structural buildings of the class. This temple, though entered in the side, was never intended to be pierced through, but always to contain a cell. The large oblong *rath*, on the contrary, was intended to be open all round; and whether, consequently, we should consider it as a *choultry* or a *gopura* is not quite clear. One thing, at all events, seems certain—and it is what interests us most here—that the square *raths* are copies of Buddhist *viháras*, and are the originals from which all the *viswanas* in Southern India were copied, and continued to be copied nearly unchanged to a very late period. . . . On the other hand, the oblong *raths* were halls or porticoes with the Buddhists, and became the *gopuras* or gateways which are frequently, indeed generally, more important parts of Dravidian temples than the *viswanas* themselves. They too, like the *viswanas*, retain their original features very little changed to the present day.

'The other antiquities at Mahábalipur, though very interesting in themselves, are not nearly so important as the *raths* just described. The caves are generally small and fine architecturally, from the feebleness and tenuity of their supports. The southern cave-diggers had evidently not been grounded in the art like their northern compeers, the Buddhists. The long experience of the latter in the art taught them that ponderous masses were not only necessary to support their roofs, but for architectural effect; and neither they, nor the Hindus who succeeded them in the north, ever hesitated to use pillars of two or three diameters in height, or to crowd them together to any required extent. In the south, on the contrary, the cave-diggers tried to copy literally the structural pillar used to support wooden roofs. Hence, I believe, the accident to the long *rath*; and hence certainly the poor and modern look of all the southern caves, which has hitherto proved such a stumbling-block to all who have tried to guess their age. Their sculpture is better, and some of their best designs rank with those of Ellora and Elephanta, with which they were, in all probability, contemporary. Now, however, that we know that the sculptures in Cave No. 3 at Badámi were executed in the 6th century (579 A.D.), we are enabled to approximate to the date of those in the Mahábalipur caves with very tolerable certainty. The Badámi sculptures are so similar in style with the best examples there, that they cannot be far distant in date; and if placed in the following century it will not, probably, be far from the truth.'—(Fergusson.)

'On the left side of the rock, which is divided by a deep natural

cleft, the chief figure in the upper part appears to be the giant Rájá Mahá Bali Chakrabartti, with his attendant dwarfs, five Rájás with their wives, four warriors, five ascetics, and a holy Rishi in his cave temple. The lions, tigers, cheetahs, and deer, in different parts of the sculpture, show that the people have travelled from a distance through the jungles.

'In the central part of the cleft, at the bottom, on the left, is a figure seated, which I take to be Buddha, with his five disciples in front of the cave temple, with the holy Rishi. The heads of three of the disciples have been broken off. . . . In the deep recess formed by the natural cleft in the centre of the rock sculpture, is the lower part of the body and tail of the snake deity Vasuki, the Nágá Rájá; and below this is the entire figure of Ulupi, his daughter, with a canopy of three snakes rising over the head. The upper portion of the Nágá deity had been broken off, and was said to be buried in front of the sculptures. I made search for it, found it, and got it dug up, set upright, and photographed; it is the figure of a man with his hands raised in prayer, and a canopy of seven snakes rising over a pyramidal head-dress, and with the usual emblems of the Buddhist religion. To the right of these are several Rájás and men, each accompanied by his wife; six dwarfs; and eight Barudas, or figures of men and women with the legs of birds; several monkeys; a cat doing penance, while rats are running near it; two large and several small elephants; lions, tigers, geese, cocks, and hens. I thought at first that all the figures were coming to do reverence or to worship the snake deity; but when we first took photographs of this rock sculpture, the whole of the central cleft was overgrown with trees and brushwood, and the five disciples of Buddha were buried.

'Lord Napier, then Governor of Madras, visited the spot about a week after the snake deity was dug up, and had excavations made to the depth of 7 or 8 feet, which exposed a great number of figures and animals, and showed that the old road must have passed in front of the rock at a depth of 5 or 6 feet below the present level, the ground having been filled up chiefly with broken bricks and earth, with here and there large fragments of sculptured rocks, dressed stones, and cornices from the adjoining temples. The broken tusk of the large elephant was also found. To the left, and below the five disciples of Buddha, is a deer, in a very natural attitude, scratching its nose with its hind foot. The male and female elephants with their young behind them, and some of the figures of crouching tigers and cheetahs, are in a very natural and spirited style; and there is a great look of natural animation, movement, and bustle in the whole group, of which Buddha and his five disciples appear to occupy the principal position and to attract the greatest attention, while the snake deity and his daughter are, as it were, in the background, and ascetics are scattered about in several

parts. . . . One point of great importance in these early large rock sculptures is, that they represent scenes of peace with men and their wives, a single wife accompanying each, and the animals, Barudas, and birds in pairs, while the Rájá Mahábali is accompanied by dwarfs, and the other Rájás, whose rank is indicated by umbrella-bearers, have each his wife beside him. The ascetics, of whom there are five or six, have no wife. It appears to me that the story is one which represents the establishment of the Buddhist religion, or one of peace, goodwill, toleration, and kindness to all men, and to animals and birds. Mr. Fergusson declared it to be, with the exception of the pagoda at Tanjore, the finest and most important *vimana* in the south of India. It is small, being not more than 30 feet square at base, and 60 feet high; but it is free from all surrounding walls and gateways, which so detract from the grandeur of other pagodas. The same authority assigns the edifice to the 11th century, and the neighbouring excavations to the 13th or 14th.

'It is to be regretted that the inscriptions of Mahábalipur, as yet deciphered, furnish no clue to the date or history of these remarkable structures; though Dr. Babington explains one line as conveying the name of the founder, "Atirana Chánda (he who in battle is furious), Lord of kings, built this place called Atiranachandeshwara." It is equally a matter of doubt to what deity the sea-side pagoda was originally dedicated. In the chamber next the sea is a gigantic *lingam* of black polished stone, which would lead us to suppose it a temple of Siva. On the other hand, there is a gigantic figure of Vishnu, in a recumbent posture, in one of the verandahs. The uncertainty on all these points may, perhaps, heighten the zest of inspection.'—(Hunter.)

divided into four aisles by five rows of sixteen pillars, eighty in all, from which it takes its popular name of Assi Khamba or the Eighty Pillars. Many of the capitals are curiously carved with grotesque heads and squat figures. Some of the inner pillars are plain, others richly ornamented with arabesques. Four of them are supposed to represent by their sculptures the four ages of the world. The pillar known as the

Pulses occupied 2440 acres; oil-seeds, 2245 acres; fibres, 10 acres; and miscellaneous crops, 48 acres.

The Sub-division is almost entirely of a wild and rugged character, the eye being arrested by spurs of the Mahábleshwar hills. The Savitri flows through the region, and waters the rice and garden land. There is little or no sea-breeze, and the changes of temperature are great. Average rainfall, 123 inches. In 1883, the Sub-division contained 1 civil and 2 criminal courts. Police stations (*thánás*), 6;

Service, in his *District Memoir of Mathurá*, pp. 253–255 (2nd edition, 1880). Father Tieffenthaller, who visited Mahában in the middle

(1884) no canal irrigation, but the Máth branch of the Ganges canal will, if completed, pass down the whole length of the *tahsíl.*

The most important of the autumn (*kharíf*) crops are cotton and *joár*; and of the spring (*rabí*) crops, wheat and barley. Sugar-cane, rice, indigo, opium, and garden crops are very sparingly produced. The total area of the *tahsíl* in 1881–82 was 238·8 square miles, of which 194·4 square miles were cultivated, 23·7 square miles cultivable, and 20·7 square miles barren waste. Area assessed for Government revenue or paying quit-rent, 214·9 square miles, of which 174·8 square miles were cultivated. Population (1872) 143,955; (1881) 116,829, namely, males 64,037, and females 52,792; showing a decrease of 27,126, or 18·8 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 110,029; Muhammadans, 6787; Jains, 2; and Christians, 11. Of the 196 inhabited villages comprising the *tahsíl*, 127 contained less than five hundred inhabitants; 39 between five hundred and a thousand; and 30 upwards of a thousand. Amount of Government land revenue or quit-rent (1881–82), £31,356, or with local rates and cesses, £35,490. Rental, including cesses, paid by the cultivators, £55,063. In 1883 the *tahsíl* contained 1 civil and 1 criminal court, with 3 police stations (*thánás*). Strength of regular police, 38 men; village watchmen (*chaukídárs*), 211.

Mahában.—Ancient town and place of pilgrimage in Muttra (Mathurá) District, North-Western Provinces, and head-quarters of the Mahában *tahsíl*; situated in lat. 27° 25′ 35″ N., and long. 77° 47′ 30″ E., on the Jumna (Jamuná) river, about six miles below Muttra town, near the opposite bank of the river. Population (1872) 6930; (1881) 6182, namely, Hindus, 4475; Muhammadans, 1704; and 'others,' 3. Area of town site, about 100 acres. For conservancy and police purposes,

week after the snake deity was dug up, and had excavations made to the depth of 7 or 8 feet, which exposed a great number of figures and animals, and showed that the old road must have passed in front of the rock at a depth of 5 or 6 feet below the present level, the ground having been filled up chiefly with broken bricks and earth, with here and there large fragments of sculptured rocks, dressed stones, and cornices from the adjoining temples. The broken tusk of the large elephant was also found. To the left, and below the five disciples of Buddha, is a deer, in a very natural attitude, scratching its nose with its hind foot. The male and female elephants with their young behind them, and some of the figures of crouching tigers and cheetahs, are in a very natural and spirited style; and there is a great look of natural animation, and bustle in the whole group, of which Buddha and his

Mahábar.—Range of hills in Hazáribágh District, Bengal, comprising the feeders of the Sakri river on the west. These hills ext

bare of woods, appears to have once been a great forest, literally *Mahá-ban.* Even as late as 1634, the Emperor Sháh Jahán held a hunt here, and killed four tigers. This ancient woodland country, fringing the sacred Jumna, was, from very early times, associated with religious legends. The architectural remains still combine the Buddhistic and Hindu forms. In Sanskrit literature it is closely associated with GOKUL, which lies about a mile off, overhanging the stream of the Jumna. Indeed, the scenes of the youthful adventures of Krishna, which are ascribed in the Puránas to Gokul, are actually shown at Mahában, about a mile from the river. Gokul seems to have been originally the common name for the whole, although it is now restricted to what must have been the water-side suburb of the ancient town.

The ruins of Mahában rise as a hill of brick and mud covering about thirty acres, the site of the old fort. The shrine of Syám Lála, a mean cell, is perched on the highest point of the old fortifications, looking towards the Jumna. The local legend relates that when Krishna was born at Muttra, his uncle Káns, a wicked giant, knowing by prophecy that his sister's son would slay him, commanded that if she brought forth a male child, it should at once be killed. The nurse, however, fled with the infant across the river to Mahában. There, in the present shrine of Syám Lála, Jasoda (wife of Nanda) had given birth to a girl; and the nurse, changing the infants, brought back the female child to Muttra as the offspring of the giant's sister. How Krishna in the end slew the giant is well known.

The most interesting relic at Mahában is the so-called Palace of Nanda, the foster-father of the changeling Krishna. This covered court was re-erected by the Muhammadans in the time of Aurangzeb, from ancient Hindu and Buddhist materials, to serve as a mosque. It is divided into four aisles by five rows of sixteen pillars, eighty in all, from which it takes its popular name of Assi Khamba or the Eighty Pillars. Many of the capitals are curiously carved with grotesque heads and squat figures. Some of the inner pillars are plain, others richly ornamented with arabesques. Four of them are supposed to represent by their sculptures the four ages of the world. The pillar known as the

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Mahád.—Chief town of Mahád Sub-division, Kolába District, Bombay

of the last century, states that the edifice was used conjointly as a Muhammadan mosque and as a Hindu temple.

In the Palace of Nanda are laid the scenes of Krishna's infancy. His cradle, a coarse structure covered with red calico and tinsel, still stands in the pillared hall, while a blue-black image of the sacred child looks out from under a canopy against the wall. The churn in which Krishna's foster-mother made butter for the household is shown, and consists of a long bamboo sticking out of a carved stone. A spot in the wall is pointed out as the place where the sportive milkmaids hid Krishna's flute. One pillar is said to have been polished by his foster-mother's hand, as she leant against it when churning, and others have been equally polished by the hands of generations of pilgrims.

From the top of the roof the wayfarer looks down on mounds of ruins, with the Jumna beyond showing its waters at intervals, amid an expanse of sand, high grasses, and rugged ravines. Mahában is still a very popular place of pilgrimage among the Hindus. Thousands of Vishnu-worshippers, with yellow-stained clothes, yearly visit the scenes of the infancy of the child-god. But in addition to the steady stream of devotees from distant parts, the pillared hall is resorted to by Hindu mothers from the neighbouring Districts for their purification, on the sixth day after child-birth, whence the building derives its local name of the Chhatthi Pálna or Place of the Chhatthi Puja, *i.e.* 'The Sixth Day Worship.' The anniversary of Krishna's birth is also celebrated during several days in the month of Bhádon by a vast concourse of people.

The riverside village of Gokul, a mile off on the Jumna, has few relics of antiquity. Its shrines and temples are quite modern. It is approached, however, by a lofty and beautiful flight of steps (*ghát*) from the river, and for more than three centuries it has been the head-quarters of the Vallabhácharya sect, or Gokulastha Gosains. Many thousands of pilgrims, chiefly from Gujarát and Bombay, yearly resort to this centre of their faith, and have built numerous temples, generally of a rather tasteless type. Vallabhácharya, the founder of the Vishnuite sect which bears his name, was born in 1479, and his pleasure-loving religion still finds favour with the well-to-do mercantile classes of Western India.

also found. To the left, and below the five disciples of Buddha, is a deer, in a very natural attitude, scratching its nose with its hind foot. The male and female elephants with their young behind them, and some of the figures of crouching tigers and cheetahs, are in a very natural and spirited style; and there is a great look of natural animation, ... and bustle in the whole group, of which Buddha and his

Mahábar.—Range of hills in Hazáribágh District, Bengal, comprising the feeders of the Sakri river on the west. These hills extend

in a general direction east and west for 14 miles; their sides are steep, but not entirely scarped; the top undulates, with an average breadth of about a mile. The general elevation above the Sakri valley is 1600 feet, and the elevation above the sea at the eastern end, where the Survey station is fixed, 2210 feet. A waterfall, called Kokalhát (90 feet high), leaps down the northern face of the range in Gayá District. An annual fair is held in February at this picturesque spot.

Mahád.—Sub-division of Kolába District, Bombay Presidency. Bounded on the north by Mángáon and the Panth Sachiv territory; on the east by the Panth Sachiv territory; on the south by Satára District and the Khed Sub-division of Ratnágiri; and on the west by the Native State of Janjira and the Dápoli Sub-division of Ratnágiri. Area, 459 square miles. Population (1872) 113.417; (1881) 109,391 (males, 54,552; females, 54,839), or a density of 238 persons per square mile. One town and 245 villages; occupied houses, 21,467; unoccupied, 1363. Hindus number 102,591, or 93·82 per cent. of the whole; Muhammadans, 6725, or 6·14 per cent.; Jains, 49; Christians, 19; Beni-Israel Jews, 5; and Pársís, 2. Bráhmans number 1999.

Of the area (459 square miles), which has been surveyed in detail, 14·33 square miles are occupied by the lands of alienated villages. Of the remainder, 172,573 acres are arable; 33,698 acres are forest reserve; and more than 2000 acres are under grass. The area of Government land actually under tillage is 89,342 acres. In 1881–82 there were 17,078 holdings in the Sub-division. The average area of a holding is 10 acres, and the average rent 16s. 1d. The land revenue realizable in 1880 was £14,189, and the incidence of this assessment on the population, 2s. 6d. per head. The survey rates were fixed in 1866 for thirty years. Their average as follows:—For rice land, 8s. 5¼d. per acre; garden land, 6s. 5d.; uplands, 4⅜d. Of the land actually under tillage (90,418 acres), grain crops occupied 85,675 acres, or 94·7 per cent.: 29,109 acres of the whole being under *nachni* (Eleusine corocana), and 27,591 under rice (Oryza sativa). Pulses occupied 2440 acres; oil-seeds, 2245 acres; fibres, 10 acres; and miscellaneous crops, 48 acres.

The Sub-division is almost entirely of a wild and rugged character, the eye being arrested by spurs of the Mahábleshwar hills. The Savitri flows through the region, and waters the rice and garden land. There is little or no sea-breeze, and the changes of temperature are great. Average rainfall, 123 inches. In 1883, the Sub-division contained 1 civil and 2 criminal courts. Police stations (*thánás*), 6; regular police, 51 men. Head-quarters, MAHAD.

Mahád.—Chief town of Mahád Sub-division, Kolába District, Bombay

Presidency. Lat. 18° 6′ N., and long. 73° 29′ E.; 53 miles south by east of Alíbágh. Population (1881) 6804. Hindus numbered 5695; Muhammadans, 1086; Christians, 18; Jain, 1; Pársí, 1; and 'others,' 3. Mahád lies on the right or north bank of the Savitri, 34 miles east of Bánkot. At high-water spring-tides vessels drawing up to 9 feet, and canoes at all times of the tide, can pass a mile above the town. Steam launches can only reach Dasgáon.

The Buddhist caves of Pále (dating from 100 A.D.) are 2 miles north-west of Mahád. In 1538, De Castro mentions the place as having a large trade in wheat. It is not far from Ráigarh, Sivají's capital, and was often visited by the Maráthá chief. In 1771, Forbes found Mahád a fortified and well-peopled town. At Mahád was concluded, in 1796, the treaty between the Konkan rebel Nána Farnavis, Baji Ráo the Maráthá, and the English, which placed Baji Ráo as Peshwa on the throne at Poona, Nána becoming Minister. In 1802, the Peshwa took refuge in Mahád, while Holkar seized his capital. During the last Maráthá war (1818) a force under Colonel Prother occupied Mahád without opposition.

Mahád has still a large seaborne trade. The imports consist of salted and fresh fish from Malabar, Goa, and the Southern Konkan; and dates, sugar, iron, kerosine, and piece-goods from Bombay. The exports, most of them sent to Bombay, are onions, garlic, potatoes, sugar, and myrobalans. Rice is carried east through the Varanda pass to the Deccan. The average river traffic is (1883) 25 tons down-stream and 18 tons up-stream daily. During five years ending 1881, the average yearly trade was—imports, £49,353; exports, £34,394. In the fine weather, steamers run up the Savitri to Dasgáon, 5 miles below Mahád; and passengers for Mahábleshwar use this route, subsequently ascending by the Fitzgerald *ghát*, which is passable for carriages. Land communication is by the main Konkan road. Mahád is a municipality; income (1882–83), £685; incidence of municipal taxation, 1s. $0\frac{5}{8}$d. per head.

Mahádánapuram.—Town in Kulitalai *táluk*, Trichinopoli District, Madras Presidency. Population (1881) 6191, dwelling in 1268 houses. Hindus numbered 6134; Muhammadans, 50; and Christians, 7.

Mahádeo.—River in the south-east corner of the Gáro Hills District, Assam; in the bed of which a seam of good coal has been discovered. In its upper course there are several picturesque gorges, where the rocky cliffs are clothed with tropical vegetation.

Mahádeopahár.—Group of hills in Hoshangábád District, Central Provinces; isolated from the main Sátpurá range by scarps and precipitous ravines, and almost encircled by the Denwá and Sonbhadra rivers, which rise in the valley to the south, and unite on the northern side. In these hills, the 'Mahádeo sandstone' attains its greatest

development. On their southern face, where the hills rise in vertical escarpments from the Denwá valley, the sandstone mass presents a thickness of 2000 feet. On the north, the ascent is about 14 miles long to Singánami, by an excellent new road bridged and metalled throughout. A road has also been completed from the railway station of Pipária to Singánami, which, with the exception of the river Denwá, is also bridged. The plateau is varied, like a park, with glades and clumps of trees; while a stream winds down nearly its whole length, and a rim of low rocks shelters it from the winds and storms. The sanitarium of Pachmarhi, with an elevation of over 4000 feet, is situated in the Mahádeopahár plateau, 32 miles from Pipária railway station, with which it is connected by a road practicable in all seasons for all descriptions of traffic.

Mahádewa.—*Parganá* of Gonda District, Oudh; bounded on the north by *parganá* Gonda, on the east by Nawábganj, on the south by Nawábganj and Digsár, and on the west by Digsár and Gonda. Area, 90 square miles, or 58,154 acres, of which 36,801 acres are returned as under cultivation. Population (1869) 48,166; (1881) 51,492, of whom 10,038 are Bráhmans. The land, however, is principally in the possession of Rájputs, who hold 66 out of the 104 villages which comprise the *parganá*. Government revenue demand, £3655.

Mahágáon.—Estate or *zamíndári* in Sakoli *tahsíl* on the southern boundary of Bhandárá District, Central Provinces, comprising 14 villages, of which 11 are inhabited. Area, 30 square miles, of which about a tenth part is cultivated. Population (1881) 2289. The forests yield much valuable timber, chiefly teak and *sáj;* and the ample pasturage attracts large numbers of cattle during the hot months. The pasturage is not now so largely availed of by the villagers as formerly, owing to the recent imposition of grazing dues. Mahágáon (lat. 20° 44′ N., long. 80° 5′ E.), the only large village, where the *zamíndár*, who is a Rájput, resides, has a Government village school, and contains the ruins of an ancient fort. The famous hill fortress of Pratápgarh overlooks the village, though beyond its limits. In the neighbourhood of the fort is a hill with a large cave, in which water is found even in the hottest weather. The cave is annually visited by large numbers of Hindu pilgrims, and is venerated as a favourite residence of the god Siva.

Mahákálídurga ('*Rock of the Great Goddess Káli*').—Hill in Túmkúr District, Mysore State; 3610 feet above sea-level. Lat. 13° 26′ N., long. 77° 34′ E. Crowned with old fortifications.

Mahálingpur.—Town in the Mudhol State, Bombay Presidency. Lat. 16° 23′ 20″ N., long. 75° 8′ 50″ E. Population (1881) 5206. Hindus numbered 4772; Muhammadans, 420; and Jains, 14.

Mahámuní.—Buddhist temple in Chittagong District, Bengal; resorted to annually in April, on the festival of *Bishu*, by the

Khyoungthá or Júmiá Maghs and Chakmás (tribes inhabiting the Hill Tracts of Chittagong), to feast and make offerings at the shrine.

Mahámuní.—Pagoda in Akyab District, Arakan Division, British Burma; situated in lat. 20° 52′ 40″ N., and long. 93° 5′ 30″ E., to the north-east of Mro-haung or Old Arakan. This edifice, once of great celebrity, and still visited by numerous pilgrims, formerly enshrined an image of Gautama Buddha, whose traditional visit to Burma must be rejected as fabulous. According to sacred histories, Buddha, at the request of San-da-thú-ri-ya (a monarch who ascended the Burmese throne in 146 A.D.), consented to the construction of a colossal metal statue of himself, on which he breathed seven times, saying: 'My younger brother, Mahámuní, you remain here to be worshipped by human beings, Nat and Brahma.' A temple was built on the Kyauk-tawhill to contain the image; and here it remained—the Palladium of Arakan—till the conquest of the country by the Burmese in 1784, when it was carried to Amarapura. There it was placed in a building called the Maha-myat-muni, which became the most popular place of worship in the neighbourhood. The image is in the usual sitting attitude on a 'Razapallin,' or throne used by the king in the State audience hall. The figure is 12 feet high, with all the limbs in proportion, and is thickly encrusted with gold leaf, the accumulated offerings of thousands of votaries. The desire to possess the Mahámuní image was one of the causes of the war which ended in the subjugation of Arakan by the Burmese. An ancient metal bell belonging to this pagoda was kept for many years in front of the court-house at Akyab, but it has now been restored to its original place.

Mahánadí.—Literally 'the Great River;' rises in lat. 20° 10′ N., and long. 82° E., in Ráipur District, and after a course of 520 miles through the Central Provinces and Tributary States of Orissa, falls into the Bay of Bengal. The Mahánadí has an estimated catchment basin of 43,800 square miles, and its rapid flow renders its maximum discharge in time of flood second to that of no other river in India. Thus the Ganges, with an estimated catchment basin of 391,100 square miles, has a maximum flood discharge of 1,800,000 cubic feet per second; while the estimated discharge of the Mississippi is only 1,500,000. The Mahánadí, with its comparatively smaller catchment area, has a flood discharge of 1,800,000 cubic feet per second. Its depth increases by 32 feet during the flood season; in the dry weather, its discharge dwindles to 1125 cubic feet per second, while the least discharge of the Ganges is estimated at 45,000 feet.

The Course of the River.—The Mahánadí rises 25 miles south of Ráipur, on the outskirts of the wild mountainous region which bounds the Chhatísgarh plateau on the south, dividing its plateau from the

Bastar country. A pool on the lands of Sihoa village, on the elevated plain of Ráipur District, is pointed out as its actual source. Until it reaches Seorínáráyan, it is an insignificant stream, rarely available for boats; but at this point it is joined by three affluents,—the Seonát or Seo river, the Jonk, and the Hasdú. After passing the town of Malhar, the Mahánadí becomes navigable during the greater part of the year, and receives the Mánd and Kelú rivers from the north. Near Padmapur, the channel is divided by vast rocks, and rendered almost unnavigable. After receiving the Ib, it again struggles through masses of rock till it reaches Sambalpur, and lower down receives the Tel at Sonpur. Below Sonpur, the river forces its tortuous way between ridges and ledges, broken up by rocks for many miles until it reaches Dholpur in the Tributary States of Orissa. Boats shoot these rapids at a great pace, and on their return journey are dragged up with immense labour from the bank. During the rainy season, the water covers the rocks, and suffices to float down huge rafts of timber. From Dholpur the troubles from the Mahánadí rocks are at an end, and it rolls its unrestrained waters straight for the outermost line of the Gháts. This mountain line it pierces by a gorge about 40 miles in length, overlooked by hills, and shaded by forests on either side. Its stream, here deep and tranquil, is navigable at all seasons.

Having thus passed in a generally eastern direction through the Central Provinces and the Tributary States, it pours down upon the Orissa Delta through its narrow gorge at Naráj, about 7 miles west of the town of Cuttack. After traversing Cuttack District from west to east, and throwing off numerous branches, it falls into the Bay of Bengal by several channels at FALSE POINT. The principal offshoots of the Mahánadí, together with their minor distributaries, are as follow:

On the right or south bank, soon after entering the Cuttack District, it throws off a large stream—(1) the KATJURI, which immediately divides into two, of which the southern branch, under the name of the KOVAKHAI, passes into Purí District. The Kátjurí, after a further short course, throws off the Suruá, which re-unites with the parent stream after a course of a few miles. A little lower down, the Kátjurí throws off two minor distributaries from its right bank, the Large and Little Deví, which unite after a southerly course of about 20 miles; and under the name of the DEVI, the combined stream passes into Purí District, and falls into the Bay of Bengal a few miles below the southern boundary of Cuttack. A cross stream connects the Mahánadí with the left bank of the Kátjurí, which latter river ultimately falls into the Bay of Bengal under the name of the JOTDAR.

(2) The other important southern distributary of the Mahánadí is the PAIKA, which branches off from the parent stream 10 miles below Cuttack town, and rejoins it after a course of about 12 miles, along

the country lying south of the parent stream. It again branches off from the northern bank, and running in a belt joins the Mahánadí finally at Tikri opposite Táldandá.

Proceeding down the other side, the offshoots from the left or north bank of the Mahánadí are the following:—(3) The BIRUPA takes off opposite the town of Cuttack; and after flowing in a north-easterly direction for about 15 miles nearly parallel with the Calcutta road, it throws off the Gengutí from its right bank, which, after receiving the waters of the Kelo, again falls into the Birúpá. The latter river afterwards joins the Bráhmaní, and its waters ultimately find their way into the Bay of Bengal by the Dhámrá estuary. (4) The CHITARTALA branch leaves the parent stream about 10 miles below the Birúpá mouth. After flowing a few miles, the Chitartalá bifurcates into the Chitartalá and the Nún. These streams unite after a course of about 20 miles; and, under the name of the NUN, the united waters fall into the Mahánadí estuary a few miles from the coast, and so into the Bay of Bengal.

After a variety of interlacings, the Mahánadí forms two great estuaries, one generally known as the Deví, with its connected channel, the Jotdár, in the south-eastern corner of the District; the other, bearing the name of the parent river, the Mahánadí, at False Point, about half-way down the coast.

Floods.—In 1858, Captain Harris, after a series of most careful investigations, arrived at the following conclusions with regard to the Mahánadí. During high floods, 1,800,000 cubic feet of water pour every second through the Naráj gorge, 7 miles above Cuttack city, while the total distributaries and channels, half-way between that point and the Bay of Bengal, only afford accommodation for 897,449 cubic feet, or less than one-half. During time of flood, about 250,000 cubic feet per second, or from one-seventh to one-eighth of the total, strikes into Purí District by means of the Koyákhái. The remaining six-sevenths, or, in round numbers, a million and a half of cubic feet per second, pour through the Kátjurí, Birúpá, and Mahánadí proper, into Cuttack District. To get rid of this vast volume of water, the Purí rivers have only the means of carrying off 111,755 cubic feet per second, while all the distributaries in Cuttack District can only dispose of 788,694 cubic feet. The remaining 900,000 cubic feet of its maximum flood discharge—that is to say, about one-half—pours over the delta, filling the swamps, inundating the rice-fields, and converting the plains into a boundless sea. This, of course, only takes place in seasons of unusual floods, when the elaborate embankments along the lines of the Mahánadí and its distributaries prove altogether unable to control their violence.

Canal System.—Efforts have been made to husband and utilize the

vast water-supply thus thrown down on the Orissa Delta. An elaborate system of canals starts from the Mahánadí with the design, in the first place, to regulate the water-supply for irrigation; and secondly, to utilize it for navigation and commerce. From the point at which the Mahánadí pours through the Naráj gorge upon the plains, the fall averages 18 inches per mile across the delta to the sea. In the Godávarí District in Madras, the slope is said by the engineers to be about 1 foot per mile; but the fall in Orissa, as also in the case of the Godávarí, is easily overcome by locks. The first thing to be effected was to secure a uniform and a trustworthy supply at the head of the delta. To this end, a massive masonry weir 3800 feet long has been erected across the mouth of the Kátjurí, the southern bifurcation of the Mahánadí; another enormous weir, 6350 feet long, across the Mahánadí proper at Jobrá; and a third, 1980 feet long, across the Birúpá at Chaudwár. The first two of these weirs are 12½ feet, and the third 9 feet high. Each of the three branches into which the parent stream splits at the delta head is therefore regulated by a weir. These works are pierced with two sets of scouring sluices, one of which is on an improved self-raising principle. Their objects being to prevent the accumulation of sand in the river bed, and to secure a supply of water for the canals, the sluices are left open during the flood season, and closed as the river subsides. Of the four canals which form the Orissa irrigation system, two take off from the Birúpá weir, and one, with its branch, from the Mahánadí weir.

On the 31st December 1868, the Government took over the canal works from the East Indian Irrigation Company for a payment of £941,368, since which time the gradual prosecution of the scheme to completion has been sanctioned. On the 31st March 1871, the capital account, including the original price paid to the Company, amounted to £1,274,822; and on the 31st March 1885, to £2,133,723, exclusive of interest.

The canals thus taken over from the Company, and since completed, or carried to an advanced stage of construction, are four in number, viz. (1) The High-Level Canal; (2) the Kendrápárá Canal with its extensions, namely, the Gobrí Canal and the Patámundai Canal; (3) the Táldandá Canal, and (4) the Máchhgáon Canal, with their respective distributaries.

The High-Level Canal was designed to provide a navigable trade-route between Cuttack and Calcutta, and also to irrigate the country through which it passes. It starts from above the left flank of the weir across the Birúpá, 1 mile below the departure of that river from the main stream of the Mahánadí. It runs thence along the foot of the hills, northwards through Cuttack and Balasor Districts; and, as originally intended, was to have been carried across the Bengal District

of Midnapur, till it debouched on the Húglí river at Ulubáriá, below Calcutta—a total distance from its starting-point of 230 miles. The section between Midnapur town and Ulubáriá, 53 miles in length, was opened throughout for traffic in 1873; but this is now regarded as an independent work, distinct from the Orissa canal system.

General View of the Orissa Canals.—While, therefore, the now completed portion of the High-Level Canal starts northward from the Birúpá, and provides a navigable channel between that river and the Bráhmaní, with irrigation for the upland country along the foot of the hills, the Kendrápárá Canal proceeds due east along the high banks of the Chitartalá, etc., and supplies water to the lower level of the delta. It irrigates the southern edge of the tract between the Mahánadí (with its subsequent distributaries, the Chitartalá and the Nún) and the Birúpá (with its continuation the Bráhmaní). The Táldandá and the Máchhgáon Canals will deal with that part of the delta which lies between the Mahánadí and the Kátjurí; the Táldandá Canal supplying the irrigation for the northern edge of this intermediate tract, and the Máchhgáon Canal providing for the southern edge. All the canals keep on high levels. In the case of the High-Level Canal, the channel runs along the uplands at the foot of the hills. In the case of the other three, which are strictly speaking delta canals, the requisite elevation is obtained by keeping their courses along the banks of the rivers, which are always higher than the intermediate alluvial tracts.

Irrigation Capabilities.—The Orissa canals, when completed, are designed to irrigate a total of 1,600,000 acres. The people, however, are slow and averse to change; and hitherto, even the present available supply is out of all proportion to the demand, and there is little disposition to resort to irrigation for ordinary crops except when the rainfall fails. The Orissa cultivator has been accustomed to use irrigation only for the more costly sort of crops, such as *pán*-leaf, sugar-cane, tobacco, and cotton. For such crops, a field is generally selected which has the command of a natural watercourse; and the highest form of irrigation known in Orissa consists in throwing water, by means of hollow palm-trees or basket scoops, from a tank or dammed-up stream, on to the fields.

The East Indian Irrigation Company originally fixed the rates for supplying water at Rs. 5 or 10s. an acre. This rate proved to be too high, and a graduated scale was afterwards introduced, by which leases for large areas were offered at reduced rates. Even this failed to induce cultivators to buy the water; and a further concession was made, by which the separate husbandmen in a village might combine to take a general lease for their aggregate lands at the reduced rates. Much confusion and many abuses followed, and practically the Company's rates were reduced to a uniform charge of Rs. 2. 8 or 5s.

an acre. Even this failed to induce the cultivators to avail themselves largely of the canal water, and the rates were afterwards reduced to Rs. 1. 8 or 3s. an acre.

The first year in which the cultivators availed themselves of canal irrigation was 1866-67, when leases were executed for 667 acres at a total charge of £252. Of this, however, only £62 could be collected, and the rest had to be written off as a bad debt. Next year, 1867-68, leases were executed for 1842 acres, at an aggregate charge of £366; but only £175 could be collected, and the balance had again to be written off. The remissions of these two years were rendered necessary partly by the unfinished state of the works, which disabled the Company from performing its share of the contract; partly by the inexperience of the Government officers; and partly by disputes on the part of the cultivators touching the validity of the leases. A large area was irrigated by stealth, and the smallness of the returns was chiefly owing to the difficulties incident to introducing anything new into Orissa. In 1868-69, a drought at the end of the rains awoke the fears of the husbandmen, and water was taken for 9378 acres at an aggregate charge of £2288. The popular apprehensions culminated in a panic; and the demand for water became so urgent that it was found impossible to comply with the usual forms, and irrigation was granted in many cases without leases. In others, the husbandmen appropriated the water wholesale on their own account. However, after some opposition, the land which had actually received water was measured, and the people paid on the whole very fairly for what they took.

In the following year, 1870-71, a long-protracted drought again roused the cultivators to the folly of neglecting irrigation. Until far on in October, it seemed that another famine in Orissa was inevitable. Still, the rate of Rs. 2. 8 or 5s. an acre proved too high; and it was not till the Commissioner, Mr. Ravenshaw, by insisting upon the terrible risks that the Province ran, induced Government to temporarily bring down the rate of R. 1 or 2s. an acre, that water was taken on a great scale. Between 98,000 and 100,000 acres were immediately put under irrigation in Orissa and Midnapur; and even this amount of land, although insignificant compared with the future capabilities of the canal, would have sufficed to take the extreme edge off a famine.

But even this lesson failed to induce the cultivators to accept the canal water on a great scale. During the years which have since followed, some progress has been made, and additional facilities have been given to the husbandmen. The water-rate is now fixed at Rs. 1. 8 or 3s. per acre, and in 1880-81 the area actually under irrigation was 112,171 acres. The irrigated area varies greatly from year to year according to the prospects of rain. In 1882-83, the

irrigated area was as high as 128,530 acres; in 1884–85 it fell as low as 54,181 acres. The Orissa canals, therefore, cannot yet be considered as a paying enterprise, although they furnish an important guarantee against the famines, which, as recently as 1866, desolated the Province.

Financial Aspects.—The following table exhibits the receipts from, and expenses connected with, the Orissa canals for each of the 14 years ending 1884–85. This table shows that during these 14 years the total receipts from all sources amounted to Rs. 21,17,570; and the total charges, including interest on invested capital, to Rs. 1,38,95,581, leaving a deficiency of Rs. 1,17,78,011, or an average of Rs. 8,41,286 a year. Even exclusive of interest, which amounts to an average of Rs. 7,33,977 a year, the excess of charges for maintenance and establishment over the total receipts during the 14 years amounted to Rs. 15,02,336, or an average of Rs. 1,07,310 a year. The total capital expended on the Orissa canals during the 14 years amounted to Rs. 1,13,10,708, or an average or Rs. 8,07,908 a year.

Financial Statistics of the Orissa Canals for the Years 1871–72 to 1884–85: shown in Rupees.

Year.	Receipts.			Expenditure.			Deficiency.	Capital Expended during Year.
	Irrigation Assessments.	Navigation Tolls.	Total.	Charges of Maintenance and Establishment.	Interest on Capital.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs. at 4½ per cent.	Rs.	Rs.	Rs.
1871-72,	29,085	14,867	43,952	2,25,944	4,64,503	6,90,447	6,46,495	10,23,357
1872-73,	26,579	10,044	36,623	2,38,002	5,64,128	8,02,130	7,65,507	11,65,891
1873-74,	25,258	18,577	43,835	1,29,191	5,89,066	7,18,257	6,74,422	16,74 714
1874-75,	27,073	21,412	48,485	1,96,427	6,64,509	8,60,936	8,12,451	16,05,553
1875-76,	29,113	16,377	45,490	2,07,618	7,24,718	9,32,336	8,86,846	10,56,173
1876-77,	51,676	22,881	74,557	2,14 661	7,63,049	9,77,710	9,03,153	7,32,439
1877-78,	1,27,263	33,844	1,61,107	2,16,072	7,90,550	10,06,622	8,45,515	4,66,128
1878 79,	1,32,900	57,042	1,89,942	2,39,090	8,12,523	10,51,613	8,61,671	5,57,393
1879-80,	1,81,112	98,075	2,79,187	3,67,779	8,34,392	12,02,171	9,22,984	4,67,756
1880-81,	1,98,376	71,402	2,69,778	3,06,068	8,55,055	11,61,123	8,91,345	4,50,592
1881-82,	1,39,945	83,206	2,23,151	3,28,660	at 4 per cent. 7,75,721	11,04,381	8,81,230	3,33,011
1882-83,	2,11,537	1,80,473	3,20,010	3,41,540	7,89,681	11,31,221	8,11,211	3,64,960
1883-84,	1,27,716	1,10,152	2,37,868	2,93,117	8,09,762	11,02,879	8,65,011	6,39,152
1884-85,	63,783	79,802	1,43,585	3,15,737	8,38,018	11,53,755	10,10,170	7,73,589
Total,	13,71,416	7,46,154	21,17,570	36,19,906	1,02,75,675	1,38,95,581	1,17,78,011	1,13,10,708

The total amount of capital invested in the Orissa canals up to the 31st March 1885 amounted to Rs. 2,13,37,233, exclusive of interest. The total financial deficit on these canals from the time of their first opening till the 31st March 1885, is as follows:—Excess of current charges over receipts, Rs. 15,52,496; interest, Rs. 1,09,25,941; grand total deficit, Rs. 1,24,78,437.

With reference to the future prospects of this and other irrigation schemes now in course of construction in Bengal, it may be well to quote here a few sentences from the Bengal Administration Report for 1871–72. In closing a review of the past history of irrigation in Bengal, the Lieutenant-Governor remarked as follows:—'If its progress has been slow and the financial results unsatisfactory, there is, it is hoped, less reason for extreme discouragement than might at first sight appear. The amount of capital sunk in the expensive head-works and great lines of canal has been out of all proportion to the area as yet irrigable, which will be largely increased at a comparatively small expenditure on the minor distributaries. The area commanded by the water will henceforth develop in a much higher ratio to the expenditure. The difficulties presented by the prejudices and ignorance of the cultivators have been aggravated by a defective system of revenue administration, which was in many respects calculated to check rather than to promote progress. The first essentials of financial success—moderation and fixity of demand—were wanting; and while ample facilities for illicit irrigation and evasion of the just dues of the State were afforded to the *ráyat*, he had no protection against unfair or illegal assessment. From the new system better results may be anticipated, though the progress of irrigation will probably still be slow, and the time when the canals shall prove directly remunerative may be far distant.'

Physical Action of the River.—The Mahánadí has been a principal factor in the formation of the Orissa Delta. The Great River poured itself through a region, half-mud, half-water, and all jungle, into the Bay of Bengal. The shallowest parts were swamps, the deepest parts were brackish lakes; and from time to time the river writhed itself out of its former bed into new channels, twisting backwards and forwards over the delta in snake-like convolutions, turning deep lakes into fens, silting up inland seas into shallow marshes, toiling slowly and ceaselessly, till the firm earth stood up out of the waters, ready for man.

Mahánadí.—River rising in Daspallá State, Orissa, and joining the Rushikúliyá at Aska in Ganjám District, Madras. On its banks are Russellkonda and Gúmsúr.—*See* RUSHIKULIYA.

Mahánadí, Little.—River rising in Mandlá District, Central Provinces, in lat. 23° 6′ N., long. 80° 41′ E., and falling into the Son (Soane) after a course of about 100 miles, during part of which it forms the boundary between Rewá and Jabalpur. *Sál* forests clothe both sides

of the river; and coal is found on its banks near Deorí, where there is also a warm spring.

Mahánandá.—River of Bengal; rising in Mahaldirám, a hill in the Himálayan range, Dárjíling District, Bengal. From near the foot of the hills it forms the boundary between Jalpáigurí and Dárjíling as far as Phánsidewa in the extreme south-east of the latter District, except close to Siligurí, where a small tract on the east of the river bank is included in Dárjíling. The Mahánandá touches upon Jalpáigurí District a short distance above Siligurí, at which place it receives the waters of the New Bálasán. The united stream then flows southwards as far as Titályá, where it passes into Purniah District. Its chief tributaries here are the Dánk, Pitánú, Nágar, Mechí, and Kankái; the principal marts are Káliáganj, Haldíbári, Krishnaganj, and Barsoi. After a tortuous course through Purniah, the Mahánandá then enters Maldah at its extreme north, and flows south-eastwards, dividing the District into two nearly equal portions; it receives as affluents the Tángan, Purnabhaba, and Kálindrí. Twenty years ago it was nowhere fordable in this portion of its course; but it has now silted up and deteriorated, and annually becomes almost dry in parts. Eventually it falls into the Ganges or Padmá in lat. 24° 28′ 30″ N., and long. 88° 20′ 30″ E., at the southernmost corner of Maldah District, just above the police station of Godágárí in Rájsháhí District. It is a wide and deep stream, except in the dry season, and easily navigable by cargo-boats of from 15 to 20 tons burthen as high up as Káliáganj in Purniah. In the upper part of its course, it flows with a very rapid current, and is subject to sudden and heavy freshes, which render navigation impracticable. The banks of the Mahánandá are, as a rule, sloping, and in parts highly cultivated, and very little subject to diluvion at the present day. Many centuries ago, the Mahánandá appears to have flowed close under the high land on which Purniah town is built, but its waters gradually gravitated westwards, and it now flows between high banks, with an extensive low, level tract between it and its old channel.

Mahárájganj (or *Basnaulí Gangar*).—Town situated in lat. 26° 6′ 35″ N., and long. 84° 2′ 36″ E., in the centre of Sáran District, Bengal; 25 miles north-west of Chhaprá, and 10 miles south-east of Sewán. Next to Revelganj or Godna, Mahárájganj is the largest *bázár* in the District, especially for the export of grain and spices; imports of English and native iron, salt, and piece-goods. Formerly a large saltpetre depôt. Population (1881) 3226. During the rains, the grain traffic is sometimes suspended, owing to the want of river-ways and the absence of suitable roads. Police outpost.

Mahárájganj.—Town and mart in Patná District, Bengal. One of the large business quarters of Patná city; trade in the produce of Patná, Gayá, and Sháhábád Districts—food-grains and oil-seeds.

Mahárájganj. — Northern *tahsíl* of Gorakhpur District, North-Western Provinces, comprising the *parganás* of Tilpur and Bináyakpur, and a portion of *parganá* Havilí. The tract consists of a *tarái* or sub-montane forest belt, inhabited by Gurkhás, Nepálís, or Thárus, the only people who can live in its pestilential climate during the rainy season. Area, 1224 square miles, of which 568 are cultivated. Population (1872) 319,555; (1881) 365,702, namely, males 184,228, and females 181,474; showing a total increase of 46,147 persons, or 14·4 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 324,487; Muhammadans, 41,196; and 'others,' 19. Of 1151 villages comprising the *parganá*, 996 had less than five hundred inhabitants, 119 from five hundred to a thousand, 33 from one to two thousand, and 13 from two to five thousand inhabitants. Land revenue, £28,372; total Government revenue, including cesses, £31,856; rental paid by cultivators, £77,803. The *tahsíl* contained 1 criminal court in 1883, with 10 police stations (*thánás*); strength of regular police, 104 men; village watchmen (*chaukídárs*), 435.

Mahárájganj. — Town in Gorakhpur District, North-Western Provinces, and head-quarters of Mahárájganj *tahsíl.* Situated 36 miles north of Gorakhpur town. Owing to its isolation and the unhealthiness of the surrounding country, Mahárájganj is extremely unpopular as a station amongst native officials. It became the head-quarters of the *tahsíl* about 1870, when the increased land revenue of the northern *parganás* necessitated a station nearer the northern frontier bordering on Nepál. The *tahsíli* is a strong masonry building, and capable of defence against a force unprovided with artillery. The other Government buildings consist of a police station, post-office, and branch dispensary.

Mahárájganj.—Town in Unao District, Oudh.—*See* NEWALGANJ.

Mahárájnagar.—Village in Sítápur District, Oudh; situated 16 miles east of Sítápur town, on the road to Láhárpur and Kheri. Founded by Musalmáns, and originally called Islámnagar; but about five generations ago, one Rájá Tej Singh, a Gaur Rájput, siezed it, and changed its name to Mahárájnagar. The land is still owned by Gaurs. Population (1881) 1737, principally Hindus. Bi-weekly market for the sale of locally manufactured sugar and cotton rope. Government school.

Mahárájnagar.—Town in the Native State of Charakhari, Bundelkhand, Central India. Population (1881) 13,196, of whom 10,058 were Hindus, 3113 Muhammadans, and 25 'others.'

Mahárájpur.—Large village in Mandlá District, Central Provinces; situated opposite to Mandlá town, in lat. 22° 35′ N., and long. 80° 24′ E., at the confluence of the Narbadá (Nerbudda) and Banjar. Formerly called Brahmaputra, it derives its present name from Rájá Maháráj Sah, who founded the present village in 1737. It has a good school

and on the opposite bank of the Banjar, at the village of Purwá, a yearly fair takes place.

Mahárájpur.—Village in Rájmahal Sub-division, Santál Parganás, Bengal, and station on the loop-line of the East India Railway, 210 miles from Calcutta. Lat. 25° 11′ 45″ N., long. 87° 47′ E.

Mahárájpur.—Village in Gwalior State, Central India; situated in lat. 26° 29′ N., and long. 78° 5′ E. (Thornton), 15 miles north-west of Gwalior fort. Noteworthy as the scene of a victory over the Maráthá forces by the British under Sir Hugh Gough (29th Dec. 1843). The Maráthás were utterly routed, losing 56 guns and all their ammunition waggons; and retreated to the fort of Gwalior. A monument at Calcutta, constructed from the metal of the captured cannon, commemorates the victory.—*See also* GWALIOR.

Mahárám.—Petty State in the Khási Hills, Assam.—*See* MAH-RAM.

Mahàram.—Democratic State in the Khási Hills, Assam. Population (1872) 6157; revenue, £104. The presiding chief, whose title is *Siem*, is named Andar Singh. The natural products include *tezpat* or bay-leaves, black pepper, cinnamon, caoutchouc, and honey. Limestone is quarried, and iron-ore is manufactured into implements of native use.

Maháráshtra.—One of the nine kingdoms of Southern India in the time of Hiuen Tsiang, the Chinese Pilgrim (640 A.D.). The following account is from General Cunningham's *Ancient Geography of India* (pp. 553 *sqq.*):—

'From Konkana, the pilgrim proceeded to the north-west for 2400 to 2500 *li*, or upwards of 400 miles, to Mo-ho-la-cha or Mahárásbtra. The capital was 30 *li* or 5 miles in circuit, and on the west side touched a large river. From this description alone I should be inclined to adopt Paithán or Pratishthána, on the Godávari, as the capital of Mahárásbtra in the 7th century. It is mentioned by Ptolemy as Baithana, and by the author of the *Periplus* as Plithána, which should no doubt be corrected to Paithána.

'But the subsequent distance of 1000 *li*, or 167 miles, westward or north-westward to Bhároch (Broach) is much too small, as the actual distance between Paithan and Bhároch is not less than 250 miles. M. Vivien Le Saint-Martin thinks that Devagiri accords better with the position indicated; but Devagiri is not situated on any river, and its distance from Bhároch is about 200 miles. I think it more probable that Kalyáni is the place intended, as we know that it was the ancient capital of the Chálukya dynasty. Its position also agrees better with both of Hiuen Tsiang's distances, as it is about 400 miles to the north-west of Anagundi, and 180 or 190 miles to the south of Bhároch. To the west of the city also flows the Kailás river, which at this point is a large stream. Kalyán or Kalyáni is mentioned by Kosmas Indiko-

pleustes, in the 6th century, as the seat of a Christian bishopric, under the name of Kalliana; and by the author of the *Periplus*, in the 2nd century, as Kalliena, which had been a famous emporium in the time of Saraganos the elder. The name of Kalyána also occurs several times in the Kánhari cave inscriptions, which date from the 1st and 2nd centuries of the Christian era.

'The circuit of the Province is said to be 6000 *li*, or 1000 miles, which agrees with the dimensions of the tract remaining unassigned between Málwá on the north, Kosala and Andhra on the east, Konkana on the south, and the sea on the west. The limiting points of this tract are Dámán and Vingorla on the sea-coast, and Idalábád and Haidarábád inland, which give a circuit of rather more than 1000 miles.

'On the eastern frontier of the kingdom there was a great mountain with ridges rising one over another, and scarped crests. In former days, the Arhat Achára had built a monastery, with rooms excavated in the rock, and a front of two storeys in height facing a sombre valley. The *vihár* attached to it was 100 feet in height; and in the midst of the monastery there was a stone statue of Buddha about 70 feet high, which was surmounted by 7 stone caps suspended in the air without any apparent support. The walls of the *vihár* were divided all round into panels, in which were sculptured with minute detail all the great events of Buddha's life. Outside the north and south gates of the monastery there were stone elephants, both on the right hand and on the left, which, according to the belief of the people, occasionally roared so loudly as to make the earth quake. The description of the hill is too vague to be of much use in identifying its position; but if the easterly bearing is correct, the hill of Ajayanti is most probably the place intended, as its bluff ridges appear to answer better to the pilgrim's account than the smoother slopes of Ellore (Elura). But with the exception of the stone elephants, the account is too vague to enable us to identify the place with any certainty. There are two stone elephants outside the Kailás excavation at Ellore, but that is a Bráhmanical temple, and not a Buddhist *vihár*. There is also an elephant close to the Indrasabha at Ellore; but the animal is inside the courtyard, instead of outside the gate as described by the pilgrim. Scenes from Buddha's life formed the common subjects of Buddhist sculpture, and would

net tax, £2; local cess, £147. Area under cultivation, 9428 acres, mostly under rice. Agricultural stock—horned cattle, 5766; pigs, 103; ploughs, 1593; and carts, 1435.

Mahatpur.—Town and municipality in Nákodar Sub-division, Jalandhar (Jullundur) District, Punjab. Lat. 31° 3′ N., long. 75° 31′ E. Population (1868) 6374; (1881) 6011, namely, Muhammadans, 3782; Hindus, 2154; and Sikhs, 75. Number of houses, 1029. The town is reputed to be of great antiquity, but now unimportant politically

certain that the pilgrim must have visited the Buddhist establishments at Kánhari, which are not more than 25 miles distant from Kalyáni.

'The numerous inscriptions at Kánhari show that some of its excavations must date as early as the 1st century before Christ, and the bulk of them during the 1st and 2nd centuries after Christ. One of the inscriptions is dated in the year 30 of the Sakádityakál, or 108 A.D. No remains of stone elephants have yet been found at Kánhari; but as the structural façades in front of the excavated *vihárs* have all fallen down, some elephant torsos may yet be discovered amongst the ruins along the foot of the scarped rock. Mr. E. West has already disinterred the remains of a stone stupa with all its sculptured friezes from amongst these ruins, and further research will no doubt bring to light many other interesting remains.'

Mahásthángarh. — Ancient shrine and scene of a fair in Bográ District, Bengal; situated in lat. 24° 56′ 40″ N., and long. 89° 24′ E., 7 miles north of Bográ town. The traditional capital of a monarch, Parasuráma, who ruled over 22 feudatory princes, and who is identified by the Bráhmans with the sixth incarnation of Vishnu. The common people assign a much later date to this Parasuráma of Mahásthángarh, and say that he was destroyed by a Muhammadan saint, named Sháh Sultán Hazrat Auliyá. The place accordingly forms a nucleus around which many legends of both Hindu and Musalmán origin have gathered. Numerous remains connected with the two religions mark its site, and it was for long a Muhammadan shrine of great sanctity.

An ancient grant of about 650 acres from the Delhi Emperor, subsequently confirmed by the Mughal Governor of Dacca in 1666, still supports a fraternity of *fakírs*. Resumption proceedings, instituted by Government in 1836, were abandoned in 1844, on proof of the great antiquity of the grant, although the original deed or *sanad* had been lost. A fair held in April yields about £60 to the shrine. Coins, dating as far back as 1448 A.D., have been discovered on the spot, and it affords a promising site for archæological excavations. In the local traditions, the oldest fables of Hindu mythology are confused with comparatively recent events in the Muhammadan conquest of Bengal.—(For details, see *Statistical Account of Bengal*, vol. viii. pp. 192–196.)

indicated; but Devagiri is not situated on any river, and its distance from Bhároch is about 200 miles. I think it more probable that Kalyáni is the place intended, as we know that it was the ancient capital of the Chálukya dynasty. Its position also agrees better with both of Hiuen Tsiang's distances, as it is about 400 miles to the north-west of Anagundi, and 180 or 190 miles to the south of Bhároch. To the west of the city also flows the Kailás river, which at this point i[s] a large stream. Kalyán or Kalyáni is mentioned by Kosmas Indik[o]

The area is returned (1884) officially at 5909 hectares, or 2391 acres. Population (1871) 8492; (1885) 8280, namely, 3915 males and 4365 females. According to the Census of 1881, the number of British

Maháthaman. — Township in Prome District, Pegu Division, British Burma. Area, 556 square miles. Bounded north by Thayet-myo District; and east, south, and west by the Shwe-lay, Paung-de, and Shwe-daung townships respectively. The north and north-east portions are undulating, and are covered with valuable forest. Farther to the west, the country is to a great extent level and under cultivation, while a considerable tract stretching to the south is waste land. This tract skirts the hills forming the boundary between Mahathaman and Shwe-daung townships. South of Prome, it is confined on the west by undulating ground gradually passing into low hills covered with *eng* (Dipterocarpus tuberculatus) forest, and extending southwards for many miles. On the east, the lower spurs of the Yoma Hills bound it; while the centre of the plain is drained by the Zay, the head-waters of the Myit-ma-ka, which receives all the water from the hilly country east and west. On the hills to the north-east and north, cotton is largely cultivated. There are two separate systems of drainage, one in the north connected with the Irawadi, and one in the south connected with the Hlaing or Rangoon river through the Zay and Myit-ma-ka. The chief streams falling into the Irawadi are the North and South Na-win, with their tributaries, the Gway, In-gún, and Khaung-tsauk (Chaung-sank), the three last named being unnavigable.

The Great Northern Road from Rangoon runs through Maháthaman township for a short distance, just south of Prome; there are fair-weather roads in all portions. The principal villages are Lek-kop-pin, Alo-daw-ya, and Da-kú. Four or five miles east of Prome is the ruined site of the ancient Tharekhettara or Ya-thay-myo, once the capital of the flourishing kingdom of Prome, whose sovereign ruled (*circa* 100 A.D.) over the whole valley of the Irawadi.

Maháthaman township is divided into 10 revenue circles. Manufactures of cutch and *tari* (toddy) sugar. Population (1877) 52,360; (1881) 61,581; gross revenue, £2574. Number of villages (1881–82), 73. In the same year the land revenue was £1483; capitation tax, £942; net tax, £2; local cess, £147. Area under cultivation, 9428 acres, mostly under rice. Agricultural stock—horned cattle, 5766; pigs, 103; ploughs, 1593; and carts, 1435.

Mahatpur. — Town and municipality in Nákodar Sub-division, Jalandhar (Jullundur) District, Punjab. Lat. 31° 3′ N., long. 75° 31′ E. Population (1868) 6374; (1881) 6011, namely, Muhammadans, 3782; Hindus, 2154; and Sikhs, 75. Number of houses, 1029. The town is reputed to be of great antiquity, but now unimportant politically

certain that the pilgrim must have visited the Buddhist establishments at Kánhari, which are not more than 25 miles distant from Kalyáni.

'The numerous inscriptions at Kánhari show that some of its excava-

and 3 indigenous village schools.

Mahatwár (also called *Sahatwár*).—Town in Bánsdih *tahsíl*, Ballia District, North-Western Provinces. Lat. 25° 50′ N., long. 84° 21′ E. Mahatwár is situated on the Reotí-Bánsdih road, 6 miles distant from Bánsdih town, and 12 miles from Ballia. It is the largest and most populous place in Bánsdih *tahsíl*, and is the headquarters of the Kinwár clan of Rájputs, who own more than three-fourths of the town. It is quadrangular in shape, and is traversed by one good road running east and west. The surrounding country is swampy, and the roads which connect the town with Ballia, Bánsdih, and Reotí are not open for wheeled traffic in the rainy season. Notwithstanding this serious disadvantage, Mahatwár possesses a considerable trade. Sugar and indigo are exported to Agra and Calcutta, and coarse cloth and shoes to Nepál; the imports consist of cotton and salt from Agra and Cawnpur, and tobacco and English cloth from Lower Bengal. Bánsdih forms a distributing centre for the surrounding country, and its large bi-weekly market is well attended. During August, September, and October, there is also a considerable sale of cattle every market day. Two indigo factories are owned and worked by natives. Population (1872) 8975; (1881) 11,024, namely, Hindus, 10,137, and Muhammadans, 887. Area of town site, 140 acres. A small house-tax is levied for sanitary and police purposes, which in 1881 realized £129. As a rule, the people are well off, and live in substantially built houses. The town contains a police outpost station, middle class school, and a post-office.

Mahávinyaka.—Sacred peak of the Báruníbuntá Hills, Cuttack District, Bengal; visible from Cuttack city. Consecrated during ages to Siva-worship by ascetics and pilgrims, who penetrated the surrounding jungles, braving the wild Savars and other forest tribes. The Vaishnavs, in later times, have built a monastery on the northern slope of the hill. A massive piece of rock, 12 feet in circumference, still bears the name of Mahávinyaka, the Great Ganesa or Vinyaka, from its resemblance to the elephant-headed god. The right face of the rock is considered to be his father Siva; the left face has a knot over it, fancied to represent the bound-up tresses of his mother, Gaurí or Párvatí. The rock is accordingly worshipped as the union of Siva, Gaurí, and Ganesa. A waterfall, 30 feet higher up, supplies the temple and its pilgrims.

Mahé (*Mahi*, a 'Fish'?).—French settlement within the limits of Malabar District, Madras Presidency; situated in lat. 11° 41′ 50″ N., and long. 75° 34′ 25″ E., to the south of the mouth of the river Mahé, with a roomy harbour whose rocky bar admits vessels up to 70 tons.

The area is returned (1884) officially at 5909 hectares, or 2391 acres. Population (1871) 8492; (1885) 8280, namely, 3915 males and 4365 females. According to the Census of 1881, the number of British subjects in the settlement was 1513, of whom 618 were males and 895 females. The only French settlement on the west coast, and now of little importance or commercial activity.

The place is thus described in an official report:—

'This little French settlement is about 4 miles to the south of Tellicherri. The French first settled here with a view to acquiring a share in the pepper trade, in 1722, having obtained the grant of a plot of ground for a factory from the Rájá of Kadattanád, or, as he was styled, *Boyanúr* (literally *Válunavar*, "ruler"); about the same time they obtained the grant of a piece of land at Calicut from the Zamorin, measuring about 6 acres, which is still in their possession (*see* CALICUT). In 1752 they acquired by purchase from the Rájá of Chirakkál the ports of Rámáturti, Kavái, Nileshwaram, and Mattalye; and in 1754, Mount Dilli, from the same potentate. But with the surrender of Mahé in February 1761, all these possessions fell into the hands of the English; and, with the exception of the fort at Mount Dilli, which was placed in charge of a European sergeant, all the other fortifications were razed to the ground. Mahé was restored to the French in 1765; but it was, with its surrounding dependencies, again captured by the English in 1779, to be once more restored in 1785. It was for a third time taken in 1793, and was finally given back, along with the small factory at Calicut, in 1816. Mahé was at first a place of considerable importance and trade, but having fallen so frequently into the hands of the English, the settlement and its trade suffered; and in 1782, its fortifications were not only razed to the ground, but the town was nearly entirely burnt.

'Mahé is now a decaying place, with most of its chief buildings picturesquely situated on the bank close to the river mouth. The site is hilly, but covered with a dense mass of cocoa-nut palms. It is noted for the fertility of its soil and the salubrity of its climate. The settlement is in charge of a *chef-de-service* subordinate to Pondicherri. Revenue (1883), £1790. It contains a Roman Catholic chapel, a school, and British post-office; and a long wooden bridge, maintained by the British Government, gives access to the British territory on the right bank. The coast road from Beypur (Bepur) railway terminus, running northward through Tellicherri and the military station of Cannanore, passes through Mahé.'

Máheji (or *Chinchkhed*). — Town and municipality in Khándesh District, Bombay Presidency; and a station on the Great Indian Peninsula Railway; 240 miles north-east of Bombay, and 45 miles east of Dhúlia. Population (1881) 2136; municipal income, £144;

incidence of taxation per head of population, 1s. 3d. The chief Hindu fair of Khándesh is held here annually from January to March. The fair is held in honour of Máheji, a woman of the agricultural class, who became an ascetic 200 years ago. So great was her sanctity that vows were paid to her during her lifetime. After a twelve years' stay in the hamlet of Chinchkhed close by the site of the fair, Máheji buried herself alive. The value of the goods sold at the fair in 1882 was estimated at £419,721. Lat. 20° 46′ N., long. 75° 30′ E. A horse show and agricultural exhibition are held here annually, and a post-office and dispensary are maintained during the continuance of the fair.

Mahendragiri (*Mahendra Malai*).—Mountain peak in the Eastern Gháts, Ganjám District, Madras Presidency. Lat. 18° 58′ 10″ N., long. 84° 26′ 4″ E.; 4923 feet above sea-level. The plateau is formed of porphyritic gneiss embedding large crystals of felspar, but the highest peaks are of granitic gneiss in huge prismatic blocks. There is a bungalow near the summit commanding a magnificent view, as the mountain is but 16 miles from the sea. Several temples of unknown date and megalithic structures of doubtful origin are situated near the summit, which is crowned by an ancient Sivaite temple, much shattered by lightning.

Mahendratanáya. — Two rivers in Ganjám District, Madras Presidency; rising in the Mahendragiri hill, an outlier of the range of Eastern Gháts. One of the streams so called flows eastwards, and, draining the *zamíndárís* of Budarasingi, Mandasa, and part of Jalantra, falls into the sea at Bárwá. The other and the larger stream flows south-westward into the Parla Kimedi *zamíndárí*, wherein it fills several important reservoirs for irrigation, and passing the town of Parla Kimedi, joins the river Vamsadhárá.

Mahesar.—Town in Indore State, Central India.—*See* MAHESWAR.

Máhesh.—Village suburb of Serampur, Húglí District, Bengal. Lat. 22° 44′ N., long. 88° 23′ 45″ E. Famous for the two great festivals of Jagannáth, the Snán-Játrá or 'bathing of the god,' in May, and the Rath-Játrá or 'car procession,' six days later. At the latter, the god is dragged to the village of Ballabhpur, a mile distant, and brought back after an eight days' visit, to the temple of Rádhábanllabh. An important fair is held at Máhesh during the eight days, with an attendance of about 8000 persons daily, and 100,000 people on the first and eighth day, when the procession and return journey take place.

Máhesh-rekha. — Formerly a Sub-division of Húglí District, Bengal, recently abolished, and reconstituted as the Ulubáriá Sub-division of the magisterial District of Howrah.—*See* ULUBARIA.

Mahespur.—Town and municipality in Jessor District, Bengal. Lat. 22° 55′ 55″ N., long. 88° 56′ 50″ E. Estimated population within

municipal limits, 5000; municipal income (1883-84), £250; average incidence of taxation, 11⅝d. per head.

Maheswar (*Mahesh Asura*).—Town in Indore State, Central India Agency; situated in lat. 22° 11′ N., and long. 75° 37′ E., on the north or right bank of the Narbadá (Nerbudda), which here rushes over a rocky bottom between banks 60 to 80 feet high. The stream is about 2000 feet wide at this point, and the water is reached by a vast *ghát* or flight of stone stairs reaching below the water at its lowest. It is the chief town of Maheswar district, within Holkar's *subah* or governorship of Nimar. Maheswar was formerly the residence of Ahalya Bái, widow of Khanda Ráo, son of the Mahárájá Malhar Ráo. A town of great antiquity, and mentioned in the Puránas. Under the name of Mahesvati, it was traditionally founded by Sehesra Arjuna, and formed the first capital of the Indu or Lunar race.

In more modern times Maheswar has undergone many changes. On one occasion an earthquake seems to have overturned the town, for it is stated that in digging below the surface of the site, articles of furniture are sometimes discovered lying upside down. It contains a fort in bad repair, and a fine palace, built, about fifty years ago, of grey basalt, and highly ornamented with sculptures. Thornton states that the estimated population in 1820 was 17,500. No later figures are available, for the town was not returned in the Census of 1881 as having a population of over 5000. The cloth manufactures of Maheswar are prized all over the country. They are of both cotton and silk, with gold embroidery introduced in various designs and degrees, according to the fancy and capacity of the purchasers. The *dhotís* (waist-cloths) and *sárís* (women's coverings) of Maheswar fetch larger prices than those made at Benares, and they are undoubtedly of better make. Large school, with 300 pupils.

Mahgáwán.—Town in Hardoi District, Oudh; situated 9 miles north of Sandíla. Population (1881) 3256 persons, residing in 481 mud houses. Bi-weekly market. The inhabitants have a local reputation for honesty in conducting arbitrations.

Mahi.—River of the Bombay Presidency. The Mahi has a course of from 300 to 350 miles in length, and a drainage area estimated at from 15,000 to 17,000 square miles. After the Narbadá (Nerbudda) and Tápti, it is the largest river of Gujarát, and the fifth largest in the Bombay Presidency. The main branch of the Mahi rises about 1850 feet above sea-level in the Amjhera State, Málwá, in lat. 22° 52′ N., and long. 75° 5′ E. almost due east of the town of Cambay, and distant from it in a straight line about 160 miles. The source of the river is in the Mehad Lake, half-way between the town of Amjhera and the village of Bhopáwar near the western extremity of the Vindhya mountains, where, taking a sharp bend almost at right angles to the

line of their main range, they stretch northwards to meet the Aravalli hills.

For 6 or 7 miles, the Mahi flows westward, then bending round Bhopáwar, it takes a northerly course parallel with the line of the northern Vindhya Hills. Sunk in a deep valley between banks in places more than 100 feet high, receiving as it passes many tributaries from the east, but no stream of any size from the west, for 140 miles the Mahi flows to the north till the boundary hills of Bágar force the stream to take a sudden turn westward. For 25 miles it continues to flow to the west, when, meeting the high mountains of Mewád, it makes a further bend to the south-west, which direction it keeps until its fall into the Gulf of Cambay, in lat. 22° 14′ N., and long. 72° 38′ E.

During the first part of its Gujarát course, the Mahi passes through the lands of the Mahi Kántha and Rewá Kántha States. It then enters British territory, and separates the District of Kaira on the right, from the Pánch Mahals and Baroda on the left. Farther to the west, and for the rest of its course, its right bank forms the southern boundary of the State of Cambay, and its left the northern limit of Broach District. At Bungra, 100 miles from its source, the Mahi is crossed by the Baroda-Nimach (Neemuch) road, and here the bed is 400 yards wide, with a stream of 100 yards and a depth of 1 foot. The Kaira section is about 100 miles in length, the last 45 miles of the section becoming tidal water. The limit of the tidal flow is Verákhándi, where the stream is 120 yards across, and the average depth 18 inches. About 30 miles nearer the sea, close to the village of Dehván, the river enters Broach District from the east, and forms an estuary. The distance across its mouth from Cambay to Kávi is 5 miles.

During flood time, at spring-tides, a bore is formed at the estuary, and a wall-like line of foam-topped water rushes up for 20 miles, to break on the Dehván sands. The bed of the Mahi lies so much below the level of the land on either side of its banks, that its waters cannot readily be made use of for irrigation. In fair weather the Mahi is fordable at many places—at Dehván, Gajna, Khánpur, and Ometa, for instance.

According to the legend, the Mahi is the daughter of the Earth and of the sweat that ran from the body of Indrádyumna, the King of Ujjain. Although, like other streams, it is held sacred, fear would seem to be the prevailing feeling of the natives in their worship of the Mahi. The height of its banks, and the fierceness of its floods; the deep gullies through which the traveller has to pass on his way to the river; and perhaps, above all, the bad name of the tribes on its banks, explain the proverb: 'When the Mahi is crossed, there is comfort.' Four places on the Mahi are specially sacred and much visited by pilgrims —Mingrar, Fazilpur, Angarh, and Yaspur.

Mahiganj.—Town in Rangpur District, Bengal; situated in lat. 25° 43′ 30″ N., and long. 89° 20′ E., in the vicinity of, and within the municipal limits of, the civil station of RANGPUR. Total population of Rangpur municipality (1881), 13,320; municipal revenue (1883–84), £1598, of which £947 was derived from taxation; average incidence of taxation, 1s. 5d. per head. Mahiganj was formerly a large seat of commerce, but is now a place of declining importance, for trade is gradually forsaking it for the *bázár* of Nawábganj, which is closer to the civil station. Dispensary.

Mahi Kántha, The.—Group of Native States under a Political Agency of the Government of Bombay. The territory is situated between 23° 14′ and 24° 28′ N. lat., and between 72° 40′ and 74° 5′ E. long.; with an area of 11,049 square miles, and a population (1881) of 517,485 souls. It is bounded on the north-east by the Rájput States of Udaipur (Oodeypore) and Dungarpur; on the south-east by Rewá Kántha; on the south by the British District of Kaira; and on the west by the Native State of Baroda, Ahmadábád District, and the country under the Palanpur Agency. The Mahi Kántha territory is subject to a number of chiefs, of whom the Rájá of EDAR (Idar) is by far the most important. In May 1877, these chiefs were classified into 7 divisions, according to their importance and the extent of their jurisdiction.

The Native State of Edar covers nearly half the whole territory; 11 other States are of some importance, and the remainder are estates belonging to Rájput or Kolí Thákurs, once the lawless feudatories of Baroda, and still requiring the anxious supervision of the Political Officer. The Rájá of Edar is a First-Class chief, exercising full powers of jurisdiction, both civil and criminal (in the case of British subjects only with the consent of the Political Agent). The chiefs of the Second Class exercise jurisdiction in civil cases up to £2000; and full jurisdiction in criminal cases, subject to confirmation by the Political Agent in capital cases, and with the above limitation in regard to British subjects. Chiefs of the Third Class exercise jurisdiction in civil cases up to £500, and in criminal cases up to a penalty of two years' imprisonment and £100 fine, with the above limitation in regard to British subjects; and so on for the remaining four classes, with gradually decreasing powers. There are 2 States of the Second Class—Pol and Dánta; 3 of the Third Class—Málpur, Mánsa, Mohanpur; 9 of the Fourth Class—Warsora, Pethápur, Ranásan, Punádra, Kharál, Ghorásar, Katosán, Ilol, Amalyára; 9 of the Fifth Class—Walásna, Dábha, Wásna, Sudásna, Rupál, Dadhálya, Magori, Warágám, Sáthamba; 13 of the Sixth Class—Ramás, Derol, Kheráwára, Karoli, Waktápur, Prempur, Dedhrota, Tájpuri, Hápa, Satlásna, Bhálusna, Likhi, Harol; 15 of the Seventh Class—Maguna,

Bolandra, Tejpura, Visrora, Pálej, Dehloli, Kassalpura, Mahmudpura, Ijpura, Rámpura, Ránipura, Gábat, Timba, Umbri, Motakotarna.

Physical Aspects.—Mahi Kántha includes tracts of land differing widely in character and appearance. In the north and east, the country is rough and wild, broken by ranges of steep well-wooded hills. To the south and west the country is level, well wooded, and most of it cultivated. The soil of Mahi Kántha is of two kinds, one light and sandy, the other black; both of them are rich.

With a well-marked fall from the north-east to the south-west, the country is thoroughly drained. The Saraswatí river, for about 40 miles, passes close to, and almost parallel with, the north-west boundary of the Agency. The Sábarmati river flows through Mahi Kántha for a distance of 60 miles; for 40 miles crossing the Agency from north-east to south-west, and for 20 miles skirting its western boundary. The Háthmati river passes through Mahi Kántha for about 35 miles, and joins the Sábarmati below Ahmadnagar. The Khári, the Meshwa, the Májam, the Vátrak, and other streams also drain the country. The waters of only one of them, the Háthmati, have been used for irrigation on any large scale. Between 1869 and 1873 a weir was built across the Háthmati, close above Ahmadnagar; and so much of its water as was not wanted for the people of Ahmadnagar and other places on its bank, was taken to feed a canal for irrigating the Parántij Sub-division of Ahmadábád District. Though with no natural lakes, Mahi Kántha is well supplied with ponds and wells. The Ráni Taláo has an area of 94 acres, and greatest depth of 17 feet; the Karmábáwi Taláo, area 134 acres, greatest depth 15 feet; the Bábsur Taláo, area 182 acres, greatest depth 15 feet.

History.—The earliest settlers were Bhíls and Kolis. These were subdued by Sind Rájputs whom the advent of the Muhammadan drove from their own country. In the 15th century, the Mahi Kántha (or Banks of the Mahi) fell under the sway of the Ahmadábád Kings, and on their decline under that of the Mughal Emperors. The Mughals only collected occasional tribute by moving a large force into the territory. The Maráthás followed the Mughals, and every two or three years sent their *mulkagiri* or tribute-collecting army into the region. In 1811, when the Maráthá power was declining, the British Government stipulated to collect and pay over to the Gáekwár the yearly tribute. In 1820, the British Government finally took over management of the Mahi Kántha territory. They agreed to collect and pay over the tribute free of expense to Baroda; while on its part Baroda pledged itself not to send troops into the country, or in any way to interfere with the administration. Since 1820, disturbances have occurred more than once. From 1833 to 1836 there were local tumults, which required

an armed force for their suppression. In 1857-58 a display of force became again necessary, when the registration of arms and the disarming of part of the people took place. A smart engagement was fought at Taringa Hill, and the town of Mondeti was carried by assault. In 1867 a disturbance arose at Posina. Since then, peace remained unbroken until 1881, when the Bhíls of Pol rose against their chief, and extorted from him a settlement of their claims.

In 1838, Captain (afterwards Sir James) Outram instituted border *pancháyats* for the settlement of the numerous blood-feuds and disputes between the wild Bhíls on the Mahi Kántha and Rájputána frontier. The system, which is one of money compensation for crime, has been found very effective in preventing reprisals and maintaining peace. In 1873 the rules were revised, providing for the regular assembling of the courts under a British officer as president, aided by two assessors from each of the States concerned. In 1878, arrangements were concluded for the extradition of all criminals except Bhíls, and of *bhopás* or witch-finders among the Bhíls, between Mahi Kántha and Rájputána. During the year 1878-79, measures were taken in most of the Mahi Kántha States for the suppression of illicit stills, in which the *mahuá* liquor is manufactured; but the cheapness of this liquor is still the curse of the Mahi Kántha States, as the Bhíls and Kolís cannot resist the temptation.

Population.—The Census of 1872 returned the population of the territory at 447,056; the Census of 1881 at 517,485; so that in the intervening period of nine years an increase of 70,429 persons, or 15·7 per cent., seems to have taken place. Area in 1881, 11,049 square miles; number of villages, 1816; number of occupied houses, 117,112. The density is 46·8 persons to the square mile; villages per square mile, 0·164; houses per square mile, 13·1; persons per occupied house, 4·4. Of the total population, 266,566 are males and 250,919 females. During the period 1872-1881, the female population shows an increase of 20 per cent., as against an increase of 11 per cent. among the males. This disproportionate increase is probably due in part to a more complete enumeration of the females in 1881. Of the total population, 207,760, or 40 per cent., were returned as under 15 years of age, namely, boys 108,222, and girls 99,538. Adults numbered 290,541, or 56 per cent. of the population, namely, males 147,813, and females 142,728.

Distributed according to religion, the Census of 1881 shows the following figures:—Hindus, 461,974, or 89·2 per cent.; Muhammadans, 22,408, or 4·3 per cent.; Jains, 13,905, or 2·6 per cent.; Pársís, 5; Jews, 5; Christians, 4; aboriginal tribes, 19,184. Among the Hindus, Bráhmans number 27,885; Rájputs, 19,187; Kunbís (cultivators), 80,328; Kolís (labourers), 146,567; Kumbhárs (potters),

10,890; Lohárs (blacksmiths), 7475; Máhárs (low castes), 19,233; Sonárs (goldsmiths), 1700; Chamárs, 4803; Darjís (tailors), 5368; Sutárs (carpenters), 6881; and Nápits (barbers), 6476. The different Muhammadan sects are not specified by the Census. The aboriginal population (19,184) is returned entirely as Bhíls.

The male population is grouped as regards occupation in the following six main classes:—(1) Professional class, including State officials of every kind and members of the learned professions, 5007; (2) domestic servants, inn and lodging keepers, 1867; (3) commercial class, including bankers, merchants, carriers, etc., 3151; (4) agricultural and pastoral class, including shepherds, 109,909; (5) industrial class, including all manufacturers and artisans, 30,829; and (6) indefinite and unproductive class, comprising all general labourers, male children, and members of unspecified occupations, 115,728.

Of the 1816 villages in the territory, 1165 contained in 1881 a population of less than two hundred inhabitants; 394 contained between two and five hundred; 152 between five hundred and a thousand; 79 between one and two thousand; 16 between two and three thousand; 6 between three and five thousand; 4 between five and ten thousand.

The Bhíls are the most remarkable of the Mahi Kántha tribes. They are hardy and enterprising, and as sagacious in daily conduct as they are secret and speedy when on one of their robbing expeditions. They speak a dialect composed of Hindí and Gujarátí, which is extremely difficult to understand; worship stones covered with red lead and oil; believe firmly in witchcraft, and are much addicted to witch-swinging. Ordinarily among the Mahi Kántha Bhíls, the woman chooses her own husband. At the Posina fair in the north, if a Bhíl succeeds in taking the woman he desires to marry across the river without being discovered, the parents of both agree to the marriage. If he is found out before he has crossed the river, the man is severely handled by the father of the girl. The *ver*, or Bhíl vendetta, usually takes the form of cattle-lifting. No Bhíl will disregard the *kilki* or cry which proclaims that a tribesman is in trouble.

Some Bhíls, taking the name of *bhagats* or ascetics, have become the followers of a Bhíl teacher, Kherádi Surmal. This teacher is a follower of the Hindu god Ráma (the seventh incarnation of Vishnu), and forbids the killing of animals, the drinking of liquor, and the committing of offences. Like a high-caste Hindu, the *bhagat* does not partake of food without bathing; puts a red mark on the brow, and ties a yellow strip of cloth round the turban. The Bhíls formerly treated these *bhagats* as outcasts, and caused them much annoyance. This the authorities put a stop to. In 1880, the *bhagats* were estimated at 800, and not one of their number had been accused of any crime.

The Bhíl villages are without means of defence; there are no forts in the territory; and the hills, though well clothed with forest, can be easily turned, and are not secure from the operations of regular troops.

Agriculture, Trade, etc.—The soil is of two kinds, light and black. The south and west of the Agency are level. In Rehvar and the valley of the Saraswatí there is a large irrigated area. Most of the tillage is for *kharíf* or rainy-season crops. In 1881, the male agriculturists, including landholders, cultivators, and agricultural labourers, numbered 109,909, or 21·2 per cent. of the population. The ordinary cost of irrigation, chiefly from wells and ponds, per acre, is—for wheat, from 14s. to 21s.; for barley, from £1, 6s. to £1, 8s.; for opium, £1, 10s. to £2, 5s.; and for sugar-cane, £10 to £15. Holdings vary in size from 6 to 60 acres. A set of agricultural implements for an average holding costs £3, 10s. A cart is worth £10. In 1872 there were 506,375 horned cattle; 98,624 goats; 16,187 sheep; 7811 asses; 4316 horses; and 1467 camels. Severe famines occurred in 1791 and 1813; scarcities in 1825 and 1834.

There are nine chief lines of road. Post-offices are situated in the five following towns—Edar, Ahmadnagar, Sádra, Mánsa, and Pethápur. The most important fairs are those at Sámláji and Bráhmakhed. Average annual value of merchandise sold at the Sámláji fair, £60,000.

There is a *tálukdári* school at Sádra, for the sons of the Rájás and Thákurs who are unable to attend the Rájkumár College in Káthiáwár. The total number of schools in 1882–83 was 65; scholars, 3668. In 1882–83, two new dispensaries were opened, and in the three older dispensaries the average daily attendance varied from 43 to 62. The hospital at Edar was enlarged. The people, excepting the Bhíls, have taken kindly to vaccination; 11,402 operations were performed in 1882–83. In the same year registered deaths numbered 7752, and births 11,078.

The entire revenues of the 52 States of Mahi Kántha in 1882–83 were returned at £97,163. The total tribute payable by the different States amounted in the same year to £14,005, of which the Gáekwár as superior overlord received £12,751; the Chief of Edar, £863; the British Government, £52; and other States (who receive tribute from minor attached feudatories), £339. The whole of the tribute is collected by the British Government, and handed over to the superior chiefs entitled to receive it.

Máhim.—Sub-division of Thána District, Bombay Presidency. Area, 419 square miles, containing 1 town and 185 villages. Population (1872) 71,974; (1881) 77,360, namely, 39,132 males and 38,228 females, occupying 12,592 houses. Hindus numbered 73,038; Muhammadans, 2335; and 'others,' 1987. Land revenue (1882),

£12,527. The Sub-division lies in the west of Thána District. A range of forest-clad hills divides it from north to south, and in the north-east corner are high hills with jagged peaks, of which Asheri is the chief. In the south-east, Takmak peak rises to 2000 feet above sea level. The land to the west of the central range is low, flat, and broken by swamps and tidal creeks. Climate pleasant on the coast; but in the interior the heat of the hot weather is intense, and there is much fever after the rains. Water-supply fair. The Vaitarna river, which flows through the Sub-division, is navigable for native craft of about 25 tons. Of the area of 419 square miles, about 9 square miles are occupied by the lands of alienated villages. The remainder contains 112,072 acres of cultivable land; 16,606 acres of uncultivable land; 18,406 acres of land under grass; and 115,305 acres of village sites, roads, ponds, and river beds. In 1880–81, of 112,072 acres of Government cultivable land, 42,749 acres were under actual cultivation, of which 532 acres were twice cropped; 34,681 acres were fallow. Grain crops occupied 40,232 acres; pulses, 1712 acres; oil-seeds, 48 acres; fibres, 28 acres; and miscellaneous crop, 1261 acres. In 1880 there were 6785 holdings, of an average area of $12\frac{1}{20}$ acres, paying an average Government land-tax of £1, 15s. $1\frac{1}{4}$d. In 1883, Máhim Sub-division contained two criminal courts and one police station, with 34 men of the regular police.

Máhim.—Chief town and port of the Máhim Sub-division, Thána District, Bombay Presidency; situated in lat. 19° 1′ 30″ N., and long. 72° 52′ 50″ E., about $5\frac{1}{2}$ miles west of the Pálghar station on the Bombay, Baroda, and Central India Railway, and 56 miles north of Bombay. Population (1872) 7183; (1881) 7122. Hindus numbered 6947; Muhammadans, 146; Christians, 23; Jains, 5; and Pársís, 1. Famous for its palms, 'the Máhim woods.' The village of Kelve, whose name is almost always joined with Máhim, lies on the opposite side of a creek about $2\frac{1}{2}$ miles to the south. The coast is very rocky near the harbour, and a reef stretches for two miles from the shore. A small island fort lies opposite the village of Kelve. Máhim town is to a large extent occupied by gardens. Post-office, dispensary, and two schools, with 351 scholars in 1883–84. In 1880, the dispensary afforded relief to 34 in-door and 6774 out-door patients.

Delhi Musalmáns had possession of Máhim in 1350; Gujarát governors succeeded; in 1532 the Portuguese occupied it; and in 1612 it was bravely held against the Mughals. The tomb of a Portuguese nobleman has been unearthed, and its slab placed in the Collector's garden at Thána.

Máhim is a municipal town, with an income in 1882–83 of £235; incidence of taxation, $7\frac{1}{2}$d. per head. Average annual value of trade during the five years ending 1881–82—imports, £2958, and exports,

£6730. In 1881-82 the imports were valued at £2468, and the exports at £6763. Máhim is one of the seven ports included in the Tárápur Customs division.

out the neighbourhood. The Rám Kund marks the place where Chandra Varmma, founder of the dynasty, died; and the tank is believed to be a reservoir into which the united waters of all holy streams pour themselves. The fort, now almost entirely in ruins, commands a beautiful view over the hills and lakes. The temple of Munia Devi, partially renovated, has in front of its entrance a stone pillar ascribed to Madana Varmma. Of the lakes, confined by magnificent masonry dams, two have greatly silted up; but the Kirat and Madan Ságar lakes, works of the 11th and 12th centuries, still remain deep and clear sheets of water. The shores of the lakes, and the islands in their midst (one of which, in the Madan Ságar, is connected with the mainland by a stone causeway), are thickly covered with pillars, broken sculpture, and other early remains. The numerous arms of the lakes embrace rocky tongues of land, surmounted by picturesque ruins; while on the hills above are the remains of summer-houses, where the ancient Rájás enjoyed the cool breezes from the water. Where the town runs along the northern bank of the Madan Ságar, on the artificial dam which hems it in, flights of granite steps lead down the bank, while shrines overhang the edge. Relics of Jain temples also occur.

The Chandels reigned at Mahobá for twenty generations, until Parmál, the first to drop the suffix of Varmma or Brahm, was conquered by Prithwi Ráj. About 1195 A.D., the town fell into the hands of Kutab-ud-dín. The existing monuments of Muhammadan date include the tomb of Jálhan Khán, constructed from the fragments of a Sivaite temple; and a mosque, also built of Chandel materials, and bearing an inscription in Persian, which assigns its foundation to the year 1322, during the reign of Ghiyás-ud-dín Tughlak. At a later period, Mahobá became the head-quarters of a Banjárá colony, who supplied grain to Central India. The modern town contains a *tahsíli*, police station, post-office, school, dispensary, *sarái*, *bázár*, and travellers' bungalow. Small trade in grain, English and country cloth, and *pán*.

Maholi (*Mahúli*).—*Parganá* in Misrikh *tahsíl*, Sítápur District, Oudh; bounded on the north by Kheri District, on the east by Sítápur

area under mature plant in 1881, 172 acres; approximate yield of tea in that year, 16,765 lbs.; average yield per acre of land under mature plant, 97 lbs.

Máhul. — Port in Thána District, Bombay Presidency. Lat. 19°

Mahmúdábád.—*Parganá* in Siddhauli *tahsíl*, Sítápur District, Oudh; bounded on the north by Biswán, on the east by Sadrpur, on

Incidence of Government land revenue, 2s. $0\frac{3}{8}$d. per acre of total area, 2s. $4\frac{1}{4}$d. per acre of assessed area, and 3s. $1\frac{1}{8}$d. per acre of cultivated area. Population (1869) 33,678; (1881) 37,514, namely, males 19,965, and females 17,549. The *parganá* has repeatedly changed hands, having been held successively by Pásís, Ahbans, and Gaurs. An Ahban Rájá held it at the time of the Mutiny, but his estates were confiscated for rebellion, and conferred upon loyal grantees.

Mahona.—*Parganá* in Malihábád *tahsíl*, Lucknow District, Oudh; situated along the left bank of the Gumtí river; bounded on the north by Sítápur, on the east by Bara Banki, and on the south and west by Lucknow *tahsíl*. One of the most fertile and best cultivated *parganás* in the District; but along the banks of the Gumtí, and for some distance inland, the country is sandy, and dotted with marshes. The interior consists of a large tract of jungle, still awaiting reclamation. Area, $147\frac{1}{4}$ square miles, or 94,259 acres, of which 55,817 acres are cultivated and 20,806 acres available for cultivation. Government land revenue, £12,290; average incidence, 2s. $7\frac{1}{2}$d. per acre of total area, 3s. $4\frac{1}{4}$d. per acre of assessed area, and 3s. 10d. per acre of cultivated area. Of the 195 villages comprising the *parganá*, 129 are held by Rájputs. Population (1869) 71,518; (1881) 65,248, namely, males 34,180, and females 31,068. Two towns contain upwards of 2000 inhabitants (Itaunja and Mandiáon), and eight others between 1000 and 2000 Good road communication with Lucknow and other towns. Originally held by the Bhars, these were ousted by Kurmís, who in their turn were driven out by Rájputs of the Ponwár and Chauhán tribes. The two chief *tálukdárs* are Ponwár Rájputs.

Mahona. — Town in Malihábád *tahsíl*, Lucknow District, Oudh; situated east of the Lucknow and Sítápur road, and about 15 miles from Lucknow city. It was formerly the head-quarters town of the *parganá*, and the residence of the Government officials. But the homestead of the village of Gobindpur adjoined it, and it is said that on one occasion the Bráhman proprietors of the latter village broke into the Government fort and recovered a child that they had placed there as hostage for revenue. The *ámil* thereupon moved his fort to Bahádurganj, a short distance off. The place has for a long time ceased to be of any importance. Population (1869) 3594; but this includes the two adjacent villages of Gobindpur and Kesarmau Kalán; (1881) 3013, namely, Mahona, 1586; Gobindpur, 611; and Kesarmau Kalán, 816.

governors succeeded; in 1532 the Portuguese occupied it, and ... 1612 it was bravely held against the Mughals. The tomb of a Portuguese nobleman has been unearthed, and its slab placed in the Collector's garden at Thána.

Máhim is a municipal town, with an income in 1882-83 of £235;

one on the top of the hill, known as the Inner Fort; and one to the south, known as Daríba. Founded about 800 A.D. by Rájá Chandra

ascent was from the east by the Máchi village. The gateway, which stands at the head of a very steep ravine, and the battlements along the crest of the ravine, are still perfect. The fortifications are said to have been built by the Mughals, and on the top are the ruins of a place of prayer and of a mosque. The hill has three fortified summits—Palasgarh on the north, Máhuli in the centre, and Bhandargarh on the south. Máhuli is the loftiest and largest, being upwards of half a mile long by nearly as much broad, with a plentiful supply of water. Palasgarh and

Máhrám.—Petty State in the Khásí Hills, Assam. Population, 7670; revenue (1883–84), £92. The presiding chief, whose title is *Siem*, is named U Kison Singh. The natural products include Job's tears (Coix lachryma, *Linn.*), black pepper, chillies, *tezpat* or bay leaves, honey, rice, sugar-cane, potatoes, ginger, millet, Indian corn, *soh-phlang* (an edible root), cinnamon, and caoutchouc. Limestone and iron are quarried, and the iron-ore is manufactured into implements of native use.

Mahrauní.—*Tahsíl* or Sub-division in Lálitpur District, North-Western Provinces.—*See* MIHRAUNI.

Ma-htún.—River in Thayet-myo District, Irawadi Division, British Burma.—*See* MA-TUN.

Mahuágarhí.—The highest peak of a range of hills in the District of the Santál Parganás, Bengal, in Nayá Dumká Sub-District, and within the Government forest reserve. The range rises to about 1500 feet in the form of a long ridge of unequal height, with numerous flanking spurs. One part is a table-land of considerable extent, on which it was at one time proposed to form a sanitarium.

Mahúdha.—Town in Nariád Sub-division, Kaira District, Bombay Presidency; situated in lat. 22° 48′ 30″ N., and long. 73° 1′ E. Population (1881) 9440. Hindus numbered 5806; Muhammadans, 3104; Jains, 529; and Pársís, 1. Post-office and dispensary. In 1883–84 there were 75 schools, with 671 pupils. Mahúdha is said to have been founded by a Hindu prince named Mandhúta, about 2000 years ago.

Mahudi.—Hill in the Karanpurá *parganá* of Hazáribágh District, Bengal; situated about 8 miles from the southern face of the Hazáribágh plateau. Scarped all round, forming a natural fortress; height of scarp, 800 feet; elevation above sea, 2437 feet. Detached from the northern face of the hill is a remarkable outwork (so to speak), shaped like a crescent. A tea plantation has been established on this hill; area under mature plant in 1881, 172 acres; approximate yield of tea in that year, 16,765 lbs.; average yield per acre of land under mature plant, 97 lbs.

Máhul. — Port in Thána District, Bombay Presidency. Lat. 19° 0′ 45″ N., long. 72° 56′ 45″ E. Situated 6 miles south of Kurla. Average annual value of trade during the five years ending 1881-82

Incidence of Government land revenue, 2s. $0\frac{3}{8}$d. per acre of total area, 2s. $4\frac{1}{4}$d. per acre of assessed area, and 3s. $1\frac{1}{8}$d. per acre of cultivated area. Population (1869) 33,678; (1881) 37,514, namely, males 19,965, and females 17,549. The *parganá* has repeatedly changed hands, having been held successively by Pásís, Ahbans, and Gaurs. An Ahban Rájá held it at the time of the Mutiny, but his estates were confiscated for rebellion, and conferred upon loyal grantees.

Mahona.—*Parganá* in Malihábád *tahsíl*, Lucknow District, Oudh; important crop, and is the one to which the cultivator looks wherewith to pay his rent. Indigo cultivation has extended considerably of late years, and is exported to Calcutta; the sugar goes principally to Mírzapur.

The principal landholders in Máhul *parganá* are the Rájá of Jaunpur, and a rich Muhammadan *tálukdár* of Oudh, Bakr Husain. In Atrauliá and Kauriá *parganás*, most of the resident *zamíndárs* are Palwár Rájputs. With a few exceptions, both the *zamíndárs* and the tenants are said to be involved in debt, and living from hand to mouth, the alleged causes being extravagance in living and love of litigation. The Palwárs have always had the reputation of being turbulent, and took an active part in the rebellion of 1857–58. The *tahsíl* is fairly provided with means of communication, there being three good second-class roads, and several of the third and fourth class. The Oudh and Rohilkhand Railway just touches the west of Máhul *parganá*.

The population of the *tahsíl* in 1872 was returned at 273,126, and in 1881 at 312,146, namely, males 159,423, and females 152,723; showing a total increase since 1872 of 39,020 persons. Classified according to religion, there were in 1881—Hindus 274,851, and Muhammadans 37,295. Of 941 inhabited villages, 762 contained less than five hundred inhabitants. Total area in 1881, 435·5 square miles, of which 244·2 square miles were cultivated, 81·2 square miles cultivable, and 110·1 square miles uncultivable waste. Government land revenue, £36,267; total Government revenue, including local rates and cesses levied on the land, £42,824; rental paid by cultivators, including cesses, £74,253. In 1883, the *tahsíl* contained 1 criminal court, with 4 police stations (*thánás*) and 1 outpost station; strength of regular police, 59 men, besides 399 village *chaukídárs*.

Máhuli.—*Parganá* in Sítápur District, Oudh.—*See* MAHOLI.

Máhuli.—Celebrated hill fortress in the Western Gháts, Sháhápur Sub-division, Thána District, Bombay Presidency. Situated on Máhuli hill, about 2815 feet high. Towards the south end of the hill-top is a huge cleft, probably 700 or 800 feet deep, in which stand gigantic basalt pillars, and a sheer precipice of black basalt from 500 to 600 feet high runs almost all round. There is also a small cleft right across the hill, which according to local report was used as a dungeon. The old

ascent was from the east by the Máchi village. The gateway, which stands at the head of a very steep ravine, and the battlements along the crest of the ravine, are still perfect. The fortifications are said to have been built by the Mughals, and on the top are the ruins of a place of prayer and of a mosque. The hill has three fortified summits—Palasgarh on the north, Máhuli in the centre, and Bhandargarh on the south. Máhuli is the loftiest and largest, being upwards of half a mile long by nearly as much broad, with a plentiful supply of water. Palasgarh and Bhandargarh can be reached only up the heads of the narrow ravines which separate them from Máhuli; and from the country below Máhuli is alone accessible. Máhuli fort was taken from the Mughals in 1670 by the Maráthás, by whom it was held until ceded to the British under the terms of the treaty of Poona, in 1817.

Mahurígáon.—Port on the Baitaraní, 2 miles above Chándbálí, Cuttack District, Bengal.—For the details of the trade of Mahurígáon, see CHANDBALI, its sister port.

Mahuwa.—Petty state in the Halár division of Káthiáwár, Bombay Presidency; consisting of 1 village, with 3 separate shareholders. Three miles south-west of Rájkot. Area, 76 square miles. Population (1881) 233. Estimated revenue in 1881, £200; tribute of £12 is paid to the British Government, and £3, 16s. to the Nawáb of Junágarh.

Mahuwa (*Mhowa*).—Town and port in Bhaunagar State, Káthiáwár, Bombay Presidency; situated in lat. 21° 5′ 15″ N., and long. 71° 48′ 45″ E. Population (1872) 13,457; (1881) 13,704, namely, 7523 males and 6181 females. Hindus numbered 9292; Muhammadans, 3339; Jains, 1051; Pársís, 17; and Christians, 5. The fort is 2 miles from the mouth of the bay, the east side of which is formed by an island,

expands in many places to 5 or 6 miles in breadth, overflowing a considerable portion of the low-lying lands adjoining its left bank. Some remarkable instances of alluvion and diluvion have taken place in consequence of the rapidity of its current. The river is not fordable at any period of the year. The BRAHMAPUTRA enters Maimansingh at its north-west corner, near Karáibárí, and flows south-east and south through the centre of the District as far as Tok, whence it forms the boundary between Maimansingh and Dacca as far as Bhairab Bázár, a little below which it unites its waters with those of the Meghná. The gradual formation of *chars* and bars of sand in the upper part of its bed has diverted the main volume of water into the present channel of the

contains a fort, built in the 16th century, where the Raja now resides. 13 miles.

Máibang.—Ruins in North Cachar, Assam, between two spurs of the Baráil Hills, on the north side of the watershed. Capital of the native Cachari dynasty during the 17th century, when the Cacharis

first came under Hindu influence. The site is now overgrown with jungle; but straggling fruit-trees and several small stone temples still remain.

A petty outbreak of fanatical Cacharis occurred near Máibang in January 1882. A man named Sambhudán, who had set up as a worker of miraculous cures, and as a directly inspired agent of the deity, gathered together a small body of followers, and took up his residence at Máibang, where he lived at free quarters on the forced contributions of his neighbours, and became the terror of the country-side. The Deputy Commissioner proceeded to Máibang with a force of armed police, but on his arrival found the place deserted. Meanwhile, Sambhudán with twenty followers had proceeded to Gunjong, the head quarters of the North Cachar Sub-division, about six hours' journey from Máibang, and burnt the place; killing two servants and a policeman They then returned to Máibang, where Major Boyd and his little force had encamped for the night, and attacked him at daybreak the following morning, the deluded marauders having been persuaded that Sambhudán's magical spells had rendered them invulnerable to bullets. The attack was easily repulsed, and eight or nine Cacharis were killed. Major Boyd, however, received a severe cut in the hand from a *dáo* or hatchet, which being unskilfully treated in the absence of proper medical assistance, resulted in his death from tetanus in a few days. Sambhudán evaded capture for a time, but his hiding-place was afterwards discovered. In attemping to escape from the cordon of police which surrounded him, he received a wound in the leg, from the effects of which he bled to death. A man named Mán Singh who acted as a sort of high priest to Sambhudán was sentenced to transportation for life.

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Maimansingh (*Mymensing*).—British District in the Dacca Division of the Lieutenant-Governorship of Bengal, lying between 23° 56′ and 25° 25′ N. lat., and between 89° 43′ and 91° 18′ E. long. Area, 6287 square miles. Population (1881) 3,051,966 persons. Bounded on the north by the Gáro Hills; on the east by the Assam District of Sylhet;

Indian Railway, between Jabalpur and Allahábád, runs through the State. Maihar was originally a dependency of Rewá; but many years before the establishment of British power in Baghelkhand, it had fallen into the possession of the Bundela Rájá of Panna, by whom the territory was granted to the father of Thákur Dúrjan Singh. On the British occupation, the Thákur was confirmed in his possession on his executing a deed of allegiance. On Dúrjan Singh's death in 1826, his two sons disputed the succession, and appealed to arms. The British Government put an end to the feud by dividing the territory. Bishen Singh received Maihar; Prag Dás, Bijerághogarh. The latter territory was confiscated in 1858, in consequence of the rebellion of the chief. Bishen Singh's grandson, the present chief, Rájá Raghbír Singh, is a Hindu of the Jogi sect. The title of Rájá, with a salute of 9 guns, was conferred by the British Government on Raghbír Singh and his heirs, on the occasion of the Imperial assemblage at Delhi on 1st January 1877, in recognition of the liberality displayed by him in remitting transit-duties, and ceding land for railway purposes.

especially during the hot weather and rains. During the cold season, the open parts of the jungle afford grazing grounds for cattle. The only other elevated tract in Maimansingh District is situated on the northern border, where the Susang hills rise. They are for the most part covered with thick thorny jungle, but are in some places barren and rocky. They have long even ridges, and are accessible to beasts of burthen. Their height has not been accurately ascertained.

The JAMUNA, which forms the western boundary of Maimansingh, touches the District near Dáokobá in Rangpur, and, after a course of 94 miles from north to south, leaves it at Salímábád. It is navigable for large boats throughout the year; and during the rainy season it expands in many places to 5 or 6 miles in breadth, overflowing a considerable portion of the low-lying lands adjoining its left bank. Some remarkable instances of alluvion and diluvion have taken place in consequence of the rapidity of its current. The river is not fordable at any period of the year. The BRAHMAPUTRA enters Maimansingh at its north-west corner, near Karáibárí, and flows south-east and south through the centre of the District as far as Tok, whence it forms the boundary between Maimansingh and Dacca as far as Bhairab Bázár, a little below which it unites its waters with those of the Meghná. The gradual formation of *chars* and bars of sand in the upper part of its bed has diverted the main volume of water into the present channel of the Jamuná, and the latter river has in consequence become much more important than the Brahmaputra proper. The MEGHNA ranks third among the Maimansingh rivers, but it only flows through a small portion of the District in the south-east. Among the less important streams may be mentioned the Jhinái, a tributary of the Jamuná, not navigable in

Máikal.—Range of hills in Biláspur and Mandlá District, Central Provinces; running south-west from Amarkantak for about 70 miles, and continuing thence by a similar range known as the Sálétekrí hills. The Máikal range forms the eastern scarp of the great hill system which traverses India almost from east to west, south of the Narbadá (Nerbudda) river. It rarely exceeds 2000 feet in height in Biláspur District, but a detached peak, called the Láphá Hill, attains an elevation of 3200 feet. The *dáhya* or nomadic mode of cultivation has greatly injured the magnificent forests of *sál* which once clothed the heights; but measures have now been taken to prevent further damage.

Mailapur (or *Saint Thomé*).—Suburb of Madras.—*See* MYLAPUR.

Mailavaram.—*Zamíndárí* estate in Bezwáda *táluk*, Kistna District, Madras Presidency; comprises portion of the old Kondapalli *parganá*.

Mailavaram.—Town in Bezwáda *táluk*, Kistna District, Madras Presidency. Population (1881) 3704; number of houses, 803. Police station.

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on the south-east by Tipperah District; on the south by Dacca; and on the west by the river Jamuná, which separates it from the Districts of Pabná, Bográ, and Rangpur. The administrative head-quarters are at MAIMANSINGH TOWN or NASIRABAD, on the west bank of the Brahmaputra.

Physical Aspects.—The District is for the most part level and open, covered with well-cultivated fields, and intersected by numerous small rivers and channels. To this general rule, the MADHUPUR jungle, or Gar Guzálís, forms an exception. This is a slightly elevated tract, extending from the northern part of Dacca District into the very heart of Maimansingh, almost as far as the Brahmaputra; its average height is about 60 feet above the level of the plain, and it nowhere exceeds 100 feet; it is about 45 miles in length, and from 6 to 16 miles in breadth, with a total area of about 420 square miles. The jungle, with which the tract is covered, is very dense, and contains abundance of *sál* (Shorea robusta, *Gærtn.*), which is valuable both as timber and for charcoal. This part of the District is very unhealthy, especially during the hot weather and rains. During the cold season, the open parts of the jungle afford grazing grounds for cattle. The only other elevated tract in Maimansingh District is situated on the northern border, where the Susang hills rise. They are for the most part covered with thick thorny jungle, but are in some places barren and rocky. They have long even ridges, and are accessible to beasts of burthen. Their height has not been accurately ascertained.

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the dry season; and the Kángsá, which is navigable throughout the year by boats of considerable burthen.

The land of Maimansingh District may be divided into three classes of soil, known as *báluá*, *doras*, and *matiyár*. The first of these is a light sandy loam, principally found in the neighbourhood of the large rivers, and well adapted for the growth of indigo and jute. The second description occurs in marshy lands, in which the *boro dhán* or spring rice crop is grown. The third class, which is the most valuable and fertile, consists of a rich mould, producing an abundant crop. These varieties of soil intermingle with each other, and are not confined to specific portions of the District. A different kind of soil is found in the neighbourhood of the Madhupur jungle, and in one or two other tracts, consisting of a red clay strongly impregnated with iron.

The eastern and south-eastern parts of the District abound in marshes, which contain quantities of fish; but the only sheet of water deserving the name of a lake is the Háodá *bíl*, in the northern part of the Madhupur jungle, which varies in size according to the season. Several varieties of long-stemmed rice are grown to a considerable extent in the marshes, in water varying from thirteen to fifteen feet in depth. Many of the Gáros who live at the foot of the hills gain a subsistence by pasturing cattle in the forest, or by collecting and trading in jungle products, such as beeswax, honey, *chireta*, and a coarse kind of yam (*kachu*).

The wild animals of Maimansingh are numerous. Tigers formerly infested the *char* lands in the river beds in the north-west of the District, but they are now far less common. Bears are found in the Madhupur jungle. Leopards and deer of several kinds abound; wild buffaloes and boars, which were formerly plentiful, have of late years become scarce. Elephants frequent the Gáro and Susang hills, and are yearly captured in considerable numbers. The sole right of capturing elephants in the Susang hills was formerly possessed by the Mahárájá of Susang, but he has recently sold his monopoly to Government for the sum of £15,000. Small game is abundant, including pea-fowl, florican, jungle-fowl, partridges of several kinds, and pheasants.

Population.—Prior to 1872, no systematic attempt was made at an accurate enumeration of the population of Maimansingh. A rough estimate between 1850 and 1856 returned 947,240 persons, and another calculation in 1866 made 1,197,823. The Census of 1872 showed that this was little more than half the actual total. That Census disclosed a total population of 2,348,753 on the area of the District as at present constituted. At the last Census in 1881, the population of Maimansingh District was returned at 3,051,966, showing an increase of 703,213 persons, or 29·93 per cent. in nine years. This enormous

increase is to a considerable extent more apparent than real, owing to admitted deficiencies in the enumeration of 1872. But there is no doubt that the actual advance in population has been very large.

In no part of Bengal is the condition of the general population more prosperous than in Maimansingh District. Rents are low, markets good, and failure of the crops is unknown. Much waste land that a few years ago was jungle and swamp has now been brought under cultivation; while the development of the jute industry has produced a prosperity among the cultivating classes to which the inhabitants of less favoured Districts are entire strangers. Under these favourable circumstances, the tendency to a rapid increase in a population chiefly Muhammadan is free from any check.

The results of the Census of 1881 may be briefly summarized as follows:—Area, 6287 square miles, with 7 towns and 12,602 villages; number of houses, 426,572, of which 403,162 were occupied. Total population, 3,051,966, namely, males 1,553,397, and females 1,498,569; proportion of males, 50·8 per cent. Average density of population, 485·4 persons per square mile; villages per square mile, 2·01; persons per village, 242; houses per square mile, 67·8; inmates per occupied house, 7·57. Classified according to age, there were—under 15 years, males 661,362, and females 626,771; total children, 1,288,133, or 42·2 per cent. of the population: 15 years and upwards, males 892,035, and females 871,798; total adults, 1,763,833, or 57·8 per cent. of the population. Classified according to religion, Muhammadans numbered 2,038,505; Hindus, 987,355; Christians, 151; and tribes professing aboriginal religions, 25,955.

The total number of aboriginal tribes and castes in the District, including those who are returned as Hindus by religion, was 58,532, the most numerous being the Kochs (31,997), who are all Hindus in religion; the Hájangs and the Gáros, whose numbers are not separated in the Census. The proper home of the Gáros is the hilly country to the north of the District known as the GARO HILLS. The inhabitants of this formerly semi-independent tract having been repeatedly guilty of raids on the lowland villages, and of an attack on a British survey party, it was in 1872 annexed to Bengal. In 1874, the Garo Hills were incorporated with the new Chief Commissionership of Assam. The Gáros of Maimansingh dwell for the most part in villages of their own at the foot of the hills, but some are found in the Madhupur jungle and in other parts of the District. They are a hard-working people, of unusually robust constitution; they eat all kinds of flesh, especially that of dogs; and they are very fond of liquor, manufacturing for themselves a kind of rice-beer, of which they consume large quantities.

The Muhammadans of Maimansingh, who numbered 2,038,505, or

66·79 per cent. of the population, belong to the Sunní sect, the Shiás numbering only 7838. It is stated that in the days of Musalmán supremacy, the proportion of Muhammadans to Hindus was greater than at present. Nearly all the rich Muhammadan landed families of Maimansingh are said to have settled in the District subsequently to the acquisition of the country by the British.

Of the Hindus, who numbered 987,355, or 32·35 per cent. of the total population, the high castes were returned at 52,319, of whom 50,152 were Bráhmans and 2167 Rájputs. The intermediate caste of Káyasths or writers numbered 108,409. The chief agricultural caste is that of the Kaibarttas, of whom there were 94,217. The most numerous caste is the Chandál, a class of semi-Hinduized aborigines numbering 148,380. They are cultivators, fishermen, day-labourers, etc., and some of them are employed as servants in the households of the upper classes; but they are greatly despised, and are not allowed by their masters to touch any vessel containing drinking water, or article of food. The other Hindu low castes include the following:—Nápits, 50,615; Sunrís, 44,308; Jugís, 43,393; Jaliyás, 32,011; Barhais, 28,724; Gwálás, 22,592; Máls, 21,920; Kumbhárs, 17,804; Dhobís, 17,419; Málís, 17,381; Lohárs, 14,865; Sudras, 13,802; Kapalis, 11,599; Chamárs, 11,289; Baniyás, 11,207; Telís, 9528; Tántís, 8430; Baruís, 8343; Madaks, 4943; and Kahars, 4264. Caste-rejecting Hindus were returned at 18,115. The Hindus in the south-eastern part of the District mostly belong to the Vaishnav sect. This sect has its head-quarters in the neighbouring District of Sylhet; but it has also many monasteries and places of worship (*ákrás*) in Maimansingh.

The Christian population is very small, numbering only 151 in all, of whom 31 were Europeans, 6 Eurasians, 107 natives of India, and 7 other Asiatics. The native Christians of Maimansingh District nearly all reside at the civil station, and are chiefly employed as Government clerks or as missionaries.

Rural and Town Population.—The population of the District is almost entirely rural; only 5 towns contain more than 5000 souls, with, including 2 smaller municipalities, an aggregate population of 73,956 in 1881, while 12,602 villages had a population of 2,967,034. The boat or floating population numbered 10,976. The 5 largest towns are MAIMANSINGH or NASIRABAD (population 10,561), TANGAIL (18,124), JAMALPUR (14,727), KISORIGANJ (12,898), and SHERPUR (8710). Maimansingh or Nasirábád, though neither the most populous nor the most important town in the District, is the civil station and administrative head-quarters. Jamálpur was at one time a military station, but troops are no longer stationed there; Kisoriganj is the scene of a large annual fair, held in July. The two minor

municipalities are—BAJITPUR (population 4641), and MUKTAGACHHA (4295).

Among minor towns may be mentioned—Ulákándi or Bhairab Bázár, the most important river mart in the District, with a good school and well-supplied cattle market; Phatiká, Biru or Datt's Bázár, Madárpur, Nalitábárí, Sambhuganj, Gobindganj, Kálíachápra, and Muktágáchhá, all trading villages with frequent markets; Bángáon, with several Hindu temples; Bájitpur, a village with a municipal police force; Char Garhjarifá, a small village containing the ruins of an old mud fort, said to have been built by one of the independent Muhammadan kings of Bengal; Durgápur, the site of the large but dilapidated palace of the Mahárájá of Susang; and Púrabdeholá, a large village, with an extensive sheet of beautifully clear water, called the Rájdeholá *bíl.*

The Census Report classifies the towns and villages according to size, as follows:—As many as 7651 contain less than two hundred inhabitants; 3514 from two to five hundred; 1143 from five hundred to a thousand; 262 from one to two thousand; 28 from two to three thousand; 6 from three to five thousand; 1 from five to ten thousand; 3 from ten to fifteen thousand; and 1 from fifteen to twenty thousand.

As regards occupation, the male population were classified under the following six main divisions:—Class (1) Professional, including all Government officials and professional persons, 20,915; (2) domestic servants, inn and lodging-house keepers, 36,481; (3) commercial, including bankers, merchants, traders, carriers, etc., 54,162; (4) agricultural and pastoral class, including gardeners, 780,502; (5) manufacturers and artisans, 111,682; (6) indefinite and non-productive (comprising 16,334 general labourers and male children), 549,655.

Agriculture.—The chief food staple of the District is rice, of which three crops are cultivated—namely, the *áus* or autumn crop; the *áman* or winter rice; and the *boro* or spring crop. *Aus* rice is sown from February to April and even May, and reaped from the middle of May till about the middle of September. *Aman* or winter rice, which forms the main harvest of the year, is sown in April, May, and June, and reaped in October, November, and December. *Boro* rice is sown in November and December, and reaped in March, April, and May. Among the other crops grown in the District are wheat, oats, maize, peas and other pulses, linseed, mustard, *tíl*, tobacco, a little sugar-cane, *pán*, and jute.

Jute constitutes the chief commercial staple of Maimansingh. It is cultivated throughout nearly the whole of the District, but particularly in the rich alluvial tracts formed by the Brahmaputra between Ghafargáon in the south-east of Maimansingh and Bhairab Bázár in the north of Dacca District. The river has here silted up a great deal of late

years, and the alluvial accretions (*chars*) thus formed are found to be exceedingly favourable to the growth of jute. The crop is generally sown in April or May, after the cold-weather crops have been reaped and the fields repeatedly ploughed. The ordinary quantity of seed used is about 8 lbs. per acre. As a rule, seed is not bought and sold, but is raised from the plant by the cultivator himself; when it is sold, the usual price is about 5s. 5d. a cwt., but in very brisk years it rises to £1, 1s. 10d., or even £1, 7s. 3d. a cwt. The crop is reaped from about the middle of August to the middle of October. The best time for cutting is said to be when the plant is in flower, and just before the appearance of the pods; the fibre being then of superior quality. The fibre from plants which have not flowered is weak, while that from plants in seed is harsh and wanting in gloss, though heavier and stronger than the fibre of the flowering plant. The estimated out-turn of jute in Maimansingh is from 17¼ to 19½ cwts. an acre, worth from 4s. 1d. to 5s. 5d. a cwt. The value of a good crop of jute, therefore, may be put down at £4, 4s. an acre. The total cost would be about £2, 16s. an acre if hired labour were employed; but this is rarely the case, the entire cultivation and preparation being as a rule undertaken by the husbandman and his family. The cultivators frequently form themselves into guilds or associations on the principle of mutual co-operation, and undertake by turns the cultivation of the field or the preparation of the fibre for the guild. Jute is recognised to be a very exhausting crop; and, except in the case of *chars* which are flooded annually, it is rarely grown on the same land for more than three years consecutively. To remedy the exhaustion of the soil, manure is applied, and the jute-fields in Maimansingh are allowed to lie fallow every third or fourth year.

The rapid extension of the jute trade of late years has materially improved the condition of the agricultural classes. The Collector of Maimansingh, writing on this subject, says:—'In an economic point of view, jute has been an immense boon to the inhabitants of the District. It has enabled them to utilize lands which were previously of little value, and it has poured in a supply of silver till the great bulk of the people are decidedly raised above a condition of poverty. At the same time, I am not of opinion that the production of cereals has been diminished to any appreciable extent, if, indeed, it has been diminished at all.' This crop is, in fact, as a rule cultivated by the peasantry only with a view to supplementing their regular crops of rice and seeds; and very few, if any, devote themselves to it exclusively.

It was roughly estimated in 1871 that two-thirds of the entire District were either actually under cultivation or capable of being brought under tillage, while the remaining third was uncultivable waste. Of the total area under cultivation (estimated in that year at about 3560

square miles), it was calculated that 97 per cent. was under rice. The out-turn of rice varies considerably; but upon the whole, an average out-turn from lands rented at 9s. an acre would be a total double crop (rice and a second crop) of about 14 cwts. per acre, worth about £2, 14s.; while from richer lands, paying 18s. per acre rent, a double crop of 26 cwts., valued at £5, 2s., would be a fair average.

Rates of wages are at a high level, and have considerably increased of late years; and in towns wages are about one-third higher than in the rural tracts. The rate varies according to the season of the year; unskilled labour, at harvest time or when agricultural operations are active, commands from 12s. to £1 per month. The usual monthly wage of agricultural day-labourers is about 12s.; skilled labourers receive from 18s. to £1, 16s. per month. The general prosperity of the District is such that even landless labourers belonging to the lowest classes, who exist on the margin of starvation in Western Bengal and Behar, can here live comfortably without the necessity of working every day. The demand for labour is met by immigrants from Behar and Chutiá Nágpur, who come in November, and return to their homes after the winter rice harvest has been reaped. The works on the Dacca and Maimansingh State Railway, now opened, afforded employment to a large number of immigrant labourers.

While the rate of wages has materially increased, the price of the ordinary food of the people has remained stationary. In 1871, the prices of rice were as follows:—Best cleaned rice, from 5s. 5d. to 6s. 10d. and 8s. 2d. a cwt., varying according to the localities in which it was grown; common rice, 4s. 1d. to 4s. 9d.; best paddy (unhusked rice), 4s. 1d.; and common paddy, 2s. to 2s. 4d. a cwt. The average price of common rice for the four years ending 1883–84 was 4s. 8d. per cwt. In 1883–84, a year of deficient rainfall, the price of common rice rose to 6s. 6d. per cwt., but without diminishing in any way the prosperity of the people.

Natural Calamities.—The District suffers occasionally from blights and floods, but never to any serious extent; and nothing like a general destruction of crops has occurred within the memory of the present generation. Although the famine of 1866 did not directly affect Maimansingh, prices rose in the District in that year, unhusked rice reaching 5s. 5d., and cleaned rice 11s. 7d. a cwt. It has been officially stated that the famine-point would be reached in the District if the price of paddy should rise to 10s. 11d., and that of rice to £1, 1s. 10d. a cwt. Probably, however, these figures represent a degree of scarcity beyond the famine-point. In some parts of the District, and particularly towards the south, the people are in the habit of laying in a stock of rice to guard against the contingency of high prices and the failure

of a particular harvest. While this reserve store lasted, prices would not reach the above rates. When they did touch those rates, the private stores might be held to have been exhausted, and immediate famine would be imminent. If the price of paddy were as high as 4s. 1d. (rice, 8s. 2d.) per cwt. in January or February, after the gathering in of the winter harvest, it would be prudent to anticipate the approach of famine later in the year. In the rainy season, the water communication would be sufficient to make up in a large degree, by means of importation, for the deficiency of the crops. The Dacca-Maimansingh State Railway, now completed, removes the danger of isolation of the District in time of scarcity.

Commerce, Trade, etc.—The chief articles of import are raw cotton, betel-nuts, and chillies from Tipperah; cattle from Western Bengal; cocoa-nuts from the southern Districts; and refined sugar, piece-goods, wheat, etc. chiefly from Calcutta *viâ* Náráyanganj. The principal exports are rice, jute, indigo, reed-mats, hides, brass and copper utensils, cheese, *ghí,* etc. Tobacco and muslins are also exported to a small extent. The value of the exports exceeds that of the imports, so that the balance of trade is in favour of the District. The names of the chief trading places have already been mentioned; the principal fairs are held at Kisoriganj and Husáinpur.

The District is not now the seat of any manufacturing industry on a large scale. In former times, the muslins of Kisoriganj and Bájitpur were of considerable note, and the East India Company had factories at both places; a little muslin is still made in this part of the District. The fine *sitalpáti* mats are largely manufactured in the east and south-eastern tracts, where the marshes furnish an abundant supply of reeds for the purpose. Brass and copper utensils are manufactured in several villages, both for local use and for export to the large mart at Sirájganj in Pabná, and to other places. The only other manufactures of any consequence are indigo, the description of cheese known as Dacca cheese, and *ghí* or clarified butter. Charcoal-burning is carried on at Barmí on the borders of Dacca, and also at Gabtálí on the outskirts of the Madhupur jungle. The women of the poorer classes weave a sort of coarse silk cloth from the produce of silkworms, which they rear themselves.

Roads and Means of Communication.—There are in the District about 146 miles of good road, and 124 miles of inferior tracks.

The Dacca and Maimansingh State Railway, on the metre gauge, opened in February 1886, affords access from the interior to the rising port of Náráyanganj, near the junction of the Dhaleswari, Lakshmia, and Meghná rivers in Dacca District. The line runs northwards from Náráyanganj, passing Dacca city near the 10th mile, and extends still in a northerly direction to Nasirábád at the 85th

mile. It is in contemplation to extend the line from Nasirábád, 32 miles in a north-easterly direction, to Jamalpur, and perhaps even to Sylhet.

Administration.—Both the revenue and the expenditure of the District have steadily increased since the administration passed into the hands of the British. In 1795, the first year for which records exist, the net revenue amounted to £77,160, and the net expenditure on civil administration to £12,028. By 1821–22 the revenue had increased to £92,908, and the civil expenditure to £14,521. In 1860–61 the figures were—revenue, £132,051, and expenditure, £24,460; and in 1870–71 the net revenue had grown to £161,617, and the civil expenditure to £49,574. Between 1795 and 1870, therefore, the net revenue of Maimansingh more than doubled itself, while the expenditure had increased more than fourfold. It is a curious circumstance that while the general revenue increased, as has been shown, by 109 per cent. between 1795 and 1870, the land-tax remained almost stationary during that period, the 'current demand' having risen from £80,605 in 1795, to £84,593 in 1870, or only 4·95 per cent. In 1883–84, the revenue of Maimansingh District, from the six main sources, amounted to £195,701, made up as follows:—Land revenue, £84,508; excise, £29,047; stamps, £61,741; registration, £3087; road cess, £14,546; municipal, £2772.

In 1795, the number of estates on the rent-roll was 4178, held by 4308 registered proprietors; average payment by each estate, £19, 6s., and by each proprietor, £18, 14s. 2d. In 1870–71, the number of estates had increased to 6298, and of proprietors to 7354; average payment by each estate, £13, 8s. 8d., and by each proprietor, £11, 10s. Since 1870, the subdivision of property has rapidly gone on, although the number of separate estates has remained almost stationary. In 1883–84, while the number of estates had only increased to 6317, the number of separate recorded shareholders or proprietors was returned (approximately) at 30,000. Average Government revenue paid in 1883–84 by each estate, £13, 7s. 7d.; by each individual shareholder, £2, 16s. 4d.

In 1883–84, the District contained 15 civil and 13 criminal courts. For administrative and police purposes, Maimansingh is divided into 5 Sub-divisions and 15 *thánás* or police circles, as follows:—(1) *Sadr* or head-quarters Sub-division, comprising the *thánás* of Maimansingh or Nasirábád, Phulpur, Gafargáon, and Iswaríganj; (2) Netrakona, comprising the *thánás* of Netrakona and Durgápur or Susang; (3) Jabalpur, comprising the *thánás* of Jámalpur, Díwánganj, and Sherpur; (4) Atiá, comprising the *thánás* of Atiá or Pakula, Pingna, and Gopálpur; and (5) Kisoriganj, comprising the *thánás* of Kisoriganj, Nikli or Agarsundar, and Bájitpur.

The regular police force of Maimansingh District in 1883-84 numbered 452 officers and men, besides a municipal or town police of 88 officers and men, maintained at a cost to the imperial revenues of £10,238; total imperial and municipal police, 540 officers and men, or an average of one policeman to every 11·6 square miles of area, and one to every 5651 of the population. In addition to the regular and municipal police there is a village watch or rural constabulary, numbering in 1883, 6404 men, maintained by the landholders or villagers, or by rent-free lands, at an estimated cost of £30,739. The number of criminal cases conducted by the police in the same year was 3762, in which 3692 persons were placed on trial. Of these persons, 1864, or 50·5 per cent., were convicted. Besides the District jail at the civil station, there are subsidiary jails at each of the Sub-divisional headquarters. The daily average prison population of Maimansingh jail in 1883 was 393·80, of whom 353·74 were convicts, 31·27 under-trial prisoners, and 8·79 civil prisoners. The four subsidiary jails had a daily average of 13·8 prisoners. The net cost of the jail, excluding cost of new buildings or repairs, and allowing for the proceeds of prison labour, was £1781, or an average of £4, 10s. per head.

Education has progressed rapidly during the last thirty years. In 1856-57 there were only 2 Government and aided schools in the District, attended by 387 pupils. In 1860-61, the number of such schools was 44, with 1830 pupils; and by 1870-71, the number of these schools had risen to 85, and the number of pupils attending them to 3474. Sir George Campbell's extension of the grant-in-aid system to primary schools in 1871 has resulted in a very rapid increase; and in 1872-73, the number of Government and aided schools was 174, with 6372 pupils. In addition, there were in that year 71 unaided schools in the District, attended by 2425 pupils.

Since 1872, an enormous increase of State-inspected schools has taken place, especially in 1882-83, owing to the inclusion in that year of a large number of hitherto uninspected village schools (*páthsálás*) in the Government system of education. Out of a total of 3204 schools attended by 54,284 pupils in 1882-32, the lower primary schools numbered 3144, with 51,412 pupils, being nearly double the returns for the previous year. Female education advanced in a much higher ratio, the number of girls under instruction being 5645 in 1882-83, as against 1508 in 1881-82, the increase being nearly fourfold. The Census of 1881 returned 36,917 boys and 878 girls as under instruction, besides 67,283 males and 940 females able to read and write, but not under instruction.

Medical Aspects, etc.—The climate of Maimansingh is not specially unpleasant, except towards the end of the rains, when there is much sickness both among Europeans and natives. During the remainder of

the year the District is fairly healthy. The principal endemic diseases are malarious fevers (chiefly of the intermittent type), dysentery, rheumatism, and bronchitis. Sporadic cases of cholera occur throughout the year, and the disease occasionally makes its appearance in an epidemic form. Outbreaks of small-pox are common. The health of the civil station has deteriorated of late, owing to a large *char* or sand-bank covered with low jungle having been thrown up by the river in front of the houses. Moreover, as the town lies below the level of the river bank, the surface water, instead of draining into the river, collects in filthy pools and ditches. It is not surprising, therefore, that the town should be unhealthy. In 1883 there were 15 charitable dispensaries scattered throughout the District, affording medical relief to 353 in-door and 32,418 out-door patients. The average rainfall for the 20 years ending 1881 was 97·07 inches. In 1883, a year of general deficient rainfall in Eastern Bengal, only 57·43 inches fell; but although the price of rice ranged high, no pressure was felt by any class of the people. [For further information regarding Maimansingh District, see *The Statistical Account of Bengal*, by W. W. Hunter, vol. v. pp. 383–480 (London, Trübner & Co., 1875). Also *History and Statistics of the Dacca Division* (Calcutta, 1868); the *Bengal Census Report* for 1881, and the several Provincial and Departmental Reports for 1870 and 1872, and from 1880 to 1884.]

Maimansingh.—Sub-division of Maimansingh District, Bengal, lying between 24° 7′ and 25° 11′ N. lat., and between 91° 2′ and 91° 9′ E. long. Area, 1849 square miles, with 2 towns and 3337 villages; occupied houses, 90,136. Population (1872) 571,367; (1882) 744,524, namely, males 387,183 and females 357,341, showing a total increase of population in nine years of 173,157, or 30·3 per cent. Average number of persons per square mile, 402·6; villages per square mile, 1·81; persons per village, 223; houses per square mile, 50·3; persons per house, 8·26. Classified according to religion, the population consists of—Muhammadans, 516,645; Hindus, 218,120; Christians, 77; and 'others,' 9682. The Sub-division comprises the 4 police circles (*thánás*) of Maimansingh, Ghafargáon, Iswariganj, and Phulpur. In 1883 it contained 15 magisterial, revenue, and civil courts (including the head-quarters courts); the regular police consisted of 245 men, the village watch of 1678 men.

Maimansingh. — Administrative head-quarters of Maimansingh District, Bengal.—*See* NASIRABAD.

Maini (*Máyani*).—Town and municipality in Satára District, Bombay Presidency; situated 40 miles south-east of Satára town, in lat. 17° 29′ N., and long. 74° 34′ E. Population (1881) 2997; municipal revenue (1882), £43; incidence of municipal taxation, 3d. per head. The small stream on which the town stands has had a dam thrown

across it about a mile to the east, for increasing the water-supply of the town, as well as for irrigation purposes. Post-office.

Máinpuri.—British District in the Lieutenant-Governorship of the North-Western Provinces, lying between 26° 52′ 30″ and 27° 30′ N. lat., and between 78° 27′ 45″ and 79° 28′ 30″ E. long. Area, 1697 square miles. Population in 1881, 801,216 souls. Máinpuri is a District of the Agra Division. It is bounded on the north by Etah District; on the east by Farukhábád District; on the south by Etáwah District and the Jumna (Jamuná) river; and on the west by Agra and Muttra (Mathura) Districts. The administrative head-quarters are at the town of MAINPURI, which is also the chief centre of commerce and population in the District.

Physical Aspects.—Lying in the central plateau of the Doáb, with only a small portion of its western borders abutting upon the Jumna, Máinpuri exhibits even more than the usual monotony of the Indian plains. From north to south it consists of an almost unbroken level, intersected at places by tributaries of the two main rivers, but unvaried by any greater elevations than a few undulating sand-ridges in the west of the District, and in the neighbourhood of the Kálí Nadi and Isan rivers, and by the ravines along the banks of the Jumna. A belt of jungle once stretched across its very centre; but with the advance of cultivation under British rule, only some stray patches of *dhák* forest or coarse grass now mark its former path. The District, however, is wooded throughout with mango and *shisham* groves, while isolated clumps of *babúl* trees occasionally relieve the bareness of its saline *úsar* plains.

The great natural soil divisions of Máinpuri, as in the other Districts of the middle Doáb, are *matiyár* or clay, *bhúr* or sand, *dúmat* or loam, and *piliya* or light loam. The only noticeable physical features are the natural or artificial bodies of water which have turned the level expanse of Máinpuri into a green sea of cereals, cotton, and sugar-cane. Shallow lakes or marshes (*jhíls*) abound over the whole area, but are most thickly scattered about the central table-land. On the south-western boundary, the Jumna flows in a deep alluvial bed, sometimes sweeping close to the high banks which overhang its valley, and at others leaving room for a narrow strip of fertile soil between the river and the upland plain. From the low-lying lands thus formed, a belt of ravines stretches inland for some two miles, often covered with jungle, and incapable of cultivation, but affording good pasturage for cattle, as well as safe retreats for the lawless herdsmen or Ahírs. Moving north-eastward from this point, we encounter in rapid succession the shallow channels of the Sarsa, the Agangá, the Sengar, the Rind, the Isan, and the Kálí Nadi, most of which supply water to a small tract on either side, besides giving origin to rich deposits of cultivable silt.

The Ganges Canal sweeps through the District in two long curves, passing in the direction of its greatest length from north-west to south-east. The Etáwah branch waters the country between the Sengar and the Rind, while the Cawnpur branch supplies the watershed between the latter stream and the Isan. In addition to these means of irrigation, the Lower Ganges Canal traverses the north-eastern angle of the District, and gives off distributaries to the country along the Kálí Nadi.

There are but few wild animals in the District. Antelope occur in some numbers, and *nílgái* (Portax pictus) in the *dhák* jungles. Leopards and hyænas are found in the Jumna ravines, and wolves all over the District. Pigeons, water-fowl, and quail are occasionally snared by the jungle tribe of Bahelias for sale. Pea-fowl are numerous, but they are looked upon as sacred birds, and are unmolested by the people. Many varieties of fish are found in the District, and they largely enter into the diet of the people, with the exception of Bráhmans, Jains, and some sections of the Baniyá caste. The right of fishing in the rivers and tanks is often leased to Kahárs, who sometimes pay high prices for the privilege.

History. — Tradition traces back the origin of Máinpuri to the mythical epoch of the Pándavas; and the discovery of Buddhist remains amongst the mounds which mark the sites of ancient cities leaves little doubt that the District has been the seat of a flourishing civilisation from a very early period. It formed part, apparently, of the great kingdom of Kanauj; and after the fall of that famous State, it was divided into a number of petty principalities, of which Rápri and Bhongáon were the chief. The earliest historical inhabitants were Meos, Bhars, and Chirárs, most of whom were supplanted by the Chauhán Rájputs in the 15th century. At a still earlier date, the warlike Ahírs had swarmed over the ravines of the western regions, where they remain by far the most numerous tribe to the present day.

The first precise notice of the District, however, is found in the records of its Muhammadan invaders. In 1194, Rápri was made the seat of a Musalmán governor, and continued to be the local head-quarters under many successive dynasties. During the vigorous reign of Sultán Bahlol (1450–88), Máinpuri and Etáwah formed a debatable ground between the powers of Delhi and Jaunpur, to both of which they supplied mercenary forces. After the firm establishment of the Lodí princes, Rápri remained in their hands until the invasion of the Mughals. Bábar occupied it in 1526, and the wild District of Etáwah also came into his hands without a blow. Máinpuri was wrested from the Mughals for a while by the Afghán, Kutab Khán, son of Sher Sháh, who adorned it with many noble buildings, the remains of which

still exist. On the return of Humáyún, the Mughals once more occupied Máinpuri. Akbar included it in his *sarkárs* of Kanauj and Agra. The same vigorous ruler also led an expedition into the District for the purpose of suppressing the robber tribes by whom it was infested. During the long ascendancy of the dynasty of Bábar, the Musalmáns made little advance in Máinpuri. A few Muhammadan families obtained possessions in the District, but a very small proportion of the native inhabitants accepted the faith of Islám. Under the successors of Akbar, Rápri fell into comparative insignificance, and the surrounding country became subordinate to ETAWAH.

Like the rest of the lower Doáb, Máinpuri passed, towards the end of the last century, into the power of the Maráthás, and finally became a portion of the Province of Oudh. When the neighbouring region was ceded to the British by the Wazír in the year 1801, the town became the head-quarters for the extensive District of Etáwah. With the exception of a raid by Holkar in 1804, which was repulsed by the provincial militia, Máinpuri has few events of importance to recount during the early years of British supremacy. Its unwieldy size was gradually reduced by the formation of Etah and Etáwah as separate Districts, and the jurisdiction of the authorities at Máinpuri was limited to the 11 *parganás* which lie around the town itself. The Chauhán Rájá of Máinpuri was recognised by Government as *tálukdár* or fiscal farmer of a large portion of the District. Throughout the whole territory measures were adopted for reducing to obedience the turbulent Rájput landowners, most of whom for the first time felt the strong hand of the law under British rule. The construction of the Ganges Canal was the only striking event between the cession and the Mutiny of 1857.

News of the massacre at Meerut (Merath) reached Máinpuri on the 12th of May; and on the 22nd, after tidings of the Alígarh revolt had arrived at the station, the 9th Native Infantry broke into open mutiny. The few Europeans at Máinpuri gallantly defended the town till the 29th, when the arrival of the Jhánsi rebels made it necessary to abandon the District entirely. The Magistrate and his party were accompanied as far as Shikohábád by the Gwalior troopers, who then refused to obey orders, but quietly marched off home without molesting their officers. The fugitives reached Agra in safety. Next day, the Jhánsi force attacked the town, but were beaten off by the well-disposed inhabitants. The District was then taken in hand by the Rájá of Máinpuri, who held it till the re-occupation, when he quietly surrendered himself, and order was at once restored. Since 1858, nothing has occurred to interfere with the peaceful course of civil administration.

Population.—The rapid increase of population in Máinpuri affords

the best proof of its steady progress. The Census of 1853 was the first attempt to arrive at the number of inhabitants by actual enumeration, all previous inquiries having been based upon a mere estimate or average calculation. It disclosed a total population, in the *parganás* which constitute the present District, of 634,087 persons, or 414 to the square mile. By 1865, the number had increased to 700,220, or 420 to the square mile. The Census of 1872 showed a further increase to the total of 765,845, giving a density of 452 to the square mile. The last Census of 1881 showed Máinpuri to be still steadily increasing in population, and the returns disclose a total of 801,216 souls, giving a density of 472 persons to the square mile. The above figures (assuming those for the earlier years to be as exact as the last enumeration) show that the population of Máinpuri between 1853 and 1881 increased by 167,129 persons, or 26·3 per cent., in twenty-eight years; while between 1872 and 1881, the increase was 35,371, or 4·6 per cent., in nine years.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 1697 square miles, with 5 towns and 1374 villages, and 102,037 occupied houses. Total population, 801,216, namely, males 442,094, and females 359,122; proportion of males, 55·2 per cent. This preponderance of males is doubtless due, in part at least, to the prevalence of female infanticide, some remarks upon which subject are given in a later paragraph. Average density of the population, 472 persons per square mile; villages per square mile, ·81; persons per village, 587; houses per square mile, 60·1; inmates per house, 7·8. Classified according to age, there were, under 15 years—males 163,004, females 129,063; total children, 292,067, or 36·45 per cent.: above 15 years—males 279,090, and females 230,059; total adults, 509,149, or 63·55 per cent.

As regards religious distinctions, Hindus numbered 749,139, or 93·5 per cent. of the total population; Muhammadans, 45,068, or 5·6 per cent.; Jains, 6861; Sikhs, 2; and Christians, 146.

Of the higher caste Hindus, Bráhmans numbered 64,803 persons, most of whom belong to the ancient Kanaujiyá sub-division. They are large landed proprietors, owning over 18 per cent. of the total area, and are continually adding to their possessions out of the profits of money-lending. The chief of the Kanaujiyá Bráhmans, although a resident of Farukhábád, is one of the largest and most influential landholders of this District. The Rájputs were returned at 63,141, amongst whom the Chauháns form the largest clan, numbering 26,851; the next most numerous clan are the Kirárs, with 7538 members. Many great Thákur families still retain their hereditary estates in Máinpuri, where they have long formed the aristocratic class; but much of their landed property is passing into the hands of the mercantile classes, by sale or

mortgage. However, in 1872, the Rájputs still held 44 per cent. of the total area. The Baniyás or traders were meagrely represented by 19,713, about one-half of whom are Jains. The Káyasths or writer caste numbered 9312.

The other castes of the Census amounted to an aggregate of 592,170 persons, comprising the great majority of the population. The Ahírs are the most important, both in numbers and influence, numbering 136,563, and owning over 12 per cent. of the soil. For many centuries this tribe consisted of lawless robber hordes, who held the fastnesses of the Jumna ravines; and though they have now been reduced to a comparatively industrial life, they still continue to afford the local authorities much trouble and anxiety. The Chamárs, who head the list in most of the Doáb Districts, sink to the second place in Máinpuri, with a total of 106,770. As usual, they are mere hewers of wood and drawers of water for the landowning classes, who held them in absolute serfdom before the period of British rule.

Amongst other Hindu castes, the most numerous are—the Kachhís, excellent cultivators and gardeners, numbering 74,643; Lodhás, found all over the District, also cultivators and some of them landholders, 56,501; Gadariás, shepherds, 29,787; Kahárs, palanquin-bearers, water-carriers, and fishermen, 24,018; Korís, weavers, 17,022; Náis, barbers, 16,223; Barhais, carpenters, 16,142; Dhánuks, village messengers and watchmen, 14,814; Dhobís, washermen, 13,139; Telís, oil-makers, 12,835; Kumbhars, potters, 10,994; Káyasths, clerks and writers, 9312; Bhangís, sweepers, 9876; Kalwárs, distillers, 5962; and Bhurjís, grain-parchers, 5396.

Of the Muhammadans, who number 45,068, or 5·6 per cent. of the population, about one-half are found in Shikohábád and Mustafábád *parganás*. They are almost entirely Sunnís by sect, and are for the most part poor and without social influence. Although a Christian mission has been established in the District for many years, Christianity makes no progress. Of the 146 Christians, 33 are Europeans, 11 Eurasians, and 102 natives.

Town and Rural Population.—The population of the District is almost entirely rural, and only 5 towns are returned as containing upwards of five thousand inhabitants. These are—MAINPURI (20,236), SHIKOHABAD-RUKANPUR (11,826), KARHAL (7885), BHONGAON (6778), and KORAWALI (6776). The urban population thus disclosed amounts to only 53,501, or 6·7 per cent. of the total population of the District, leaving 747,715 for the rural population. The only municipality in the District is Máinpuri; but from the four other towns above mentioned a small house-tax is levied for conservancy and police purposes. A similar house-tax is levied from the minor towns of Sirságanj, Dayáganj, and Pharhá. The Census Report classifies the 1379 towns and

villages of the District, according to size, as follows:—390 contain less than two hundred inhabitants; 507 from two hundred to five hundred; 295 from five hundred to a thousand; 129 from one to two thousand; 39 from two to three thousand; 11 from three to five thousand; 6 from five to ten thousand; and 2 from ten thousand upwards.

As regards occupation, the male population is divided as under:—(1) Professional class, including Government officials, 7983; (2) domestic class, 1812; (3) commercial class, including merchants, traders, and carriers, 11,301; (4) agricultural and pastoral class, 207,000; (5) manufacturing and industrial class, 56,856; (6) indefinite and non-productive class, including male children, 157,142.

Infanticide.—Máinpuri is one of the Districts in which the practice of female infanticide has long engaged the attention of Government. In 1842, measures were introduced for the supervision of the Chauhán Rájputs and the Phátak Ahírs, amongst whom the practice was commonest. Every female birth was reported and authenticated, and a statement of the child's health was required a month later. Illness was immediately announced to the police authorities, who thereupon investigated the case. These rules remained in force until supplemented by those of the Infanticide Act of 1870. In 1843 there was not a single female child amongst the Chauhán Rájputs; in 1847 there were 299. In spite of this partial success, the question remained a difficult one to grapple with, owing to the want of any sympathy or co-operation amongst the people themselves. In 1851, a convention of the heads of clans was held at Sámán, when a body of rules was drawn up and subscribed to. These rules, however, were never observed, as Thákur fathers were so anxious to obtain good marriages for their daughters that they paid extravagant dowers, and so made the possession of female children an expensive luxury.

In 1865, Mr. Colvin took a census of the Chauhán and Phátak villages, and found six of the former without a single female infant. In some cases, a daughter had never been known in the village. One such community was selected, and a strong police force quartered upon it. Up to 1870 some progress was made, but a large number of villages still remained under the imputation of infanticide. Fresh measures were taken under the Act of 1870; and inquiries instituted in connection with the Census of 1872 revealed the fact that many other tribes were equally implicated in the guilty practice. In 1875, though a large proportion had so far reformed as to be exempted from special supervision, there were still 276 villages on the 'proclaimed list,' under the surveillance of an organized police, the cost of whose maintenance was defrayed by a tax levied on the guilty communities. In 1881, the Census returns showed that among the suspected Rájput clans, the females still formed only 41·88 per cent., and among the

Ahírs, 43·63 per cent. of the population. The total population under suspicion of infanticide in 1881 was 201,132, namely—Ahírs, 136,561; Rájputs, 63,141; Játs, 1255; Gújars, 170; and Minás, 5. The villages under surveillance in 1881 numbered 228.

Agriculture.—Máinpuri contains comparatively little waste, almost every acre of available soil having been already brought under tillage. The cultivated area, at the date of the last Settlement of the land revenue, was returned at 607,991 acres, distributed as follows:—*Kharíf* or rain crops—cotton, 48,901 acres; *joár*, 120,497 acres; *bájra*, 74,028 acres; indigo, 5369 acres; with maize, rice, hemp, etc., bringing up the total to 299,850 acres: *Rabí* or spring crops—wheat, 108,488 acres; barley, 60,443 acres; the two mixed together, 66,488 acres; with gram, poppy, etc., making a total of 282,376 acres. There were also 17,523 acres under sugar-cane. In 1881–82, the total cultivated area was 587,849 acres, or including two-crop land, 689,325 acres. The area under the principal crops was,—*Kharíf*—*joár*, 91,665 acres; *bájra*, 68,414 acres; Indian corn, 33,357 acres; cotton, 46,380 acres; and indigo, 38,200 acres: *Rabí*—wheat, 142,394 acres; barley, 120,500 acres; wheat and barley mixed, 38,540 acres; and gram, 18,461. Sugar-cane occupied 10,611 acres. In 1883–84, out of a total assessed area of 1,086,577 acres, 581,659 acres were returned as under cultivation, or including land yielding two crops, 682,404 acres.

Cultivation has been spreading rapidly of late, and has now almost reached its utmost margin. The use of manure is general, but one application is considered sufficient in most cases for two or even three successive crops. Irrigation is widely spread, and has been recently further increased by the opening of the Lower Ganges Canal. In 1883–84, 349,762 acres, or 58·4 per cent. of the cultivated area, were artificially supplied with water. Of this total, 126,725 acres were irrigated from canals, 198,231 acres from wells, and 24,806 acres from other sources. Rotation of crops is thoroughly understood. The average out-turn of wheat on the best irrigated land is 1600 lbs. per acre; that of barley, in similar circumstances, reaches the same amount, and on 'dry' land is about one-half. The yield of cotton is 92 lbs. of cleaned fibre per acre, or 50 lbs. in excess of the average throughout the North-Western Provinces.

Two-thirds of the land is held by tenants with rights of occupancy, and only one-third by tenants-at-will. Of the total male agricultural population in 1881, 13,380 were returned as landholders, 2208 estate agents, 168,002 cultivators, and 22,502 agricultural labourers; total, 206,092, giving an average of 2·94 cultivated acres to each. The total agricultural population, however, dependent on the soil, amounted to 505,014, or 63·03 per cent. of the District population. Of the total

District area of 1697 square miles, 1695 square miles were assessed for Government revenue in 1881. Of these, 946·7 square miles were cultivated, 244·3 square miles cultivable, and 504 square miles uncultivable waste. Total amount of Government assessment, including local rates and cesses levied on land, £144,823, or an average of 4s. 2d. per cultivated acre. Amount of rental actually paid by cultivators, including rates and cesses, £244,589, or an average of 8s. 0¾d. per cultivated acre. Statements of rent-rates, however, without specification of caste, are misleading, as they depend more upon the rank or position of the tenant than on the nature of the soil. Kachhís, who are skilful and industrious cultivators, pay the highest rates; while Bráhmans have a prescriptive right to low rentals, in consideration of their sacred character; and Ahírs, by banding together against enhancement, manage to keep down all encroachments on the part of the *zamíndárs.*

Wages have risen of late years. In 1883, masons, carpenters, blacksmiths, and tailors received about 5¼d. per diem; and coolies, 3d. per diem. Prices have also been on the increase. From 1859 to 1871, the average prices of food-stuffs were as follows:—Wheat, 25 *sers* the rupee, or 4s. 6d. per cwt.; barley, 35 *sers* the rupee, or 3s. 2½d. per cwt.; *joár,* 33 *sers* the rupee, or 3s. 4¾d. per cwt.; *bájra,* 32 *sers* the rupee, or 3s. 6d. per cwt. The average rates of food-grains in 1884 were returned as follows:—Wheat, 19 *sers* the rupee, or 5s. 11d. per cwt.; barley, 26 *sers* per rupee, or 4s. 4d. per cwt.; and *bájra* and *joár,* 24 *sers* the rupee, or 4s. 8d. per cwt.

Natural Calamities.—Máinpuri suffers little from floods, nor are the ravages of insects specially destructive. But in former years, the District had been severely visited by drought, and the famine which follows in its wake. In 1837–38 it was desolated beyond the ordinary misery of that calamitous season; and in 1860–61 another failure occurred, which, however, was greatly mitigated by the extensive relief operations undertaken by Government. Work was found for 4000 able-bodied persons daily, while gratuitous aid was afforded to an average of 4605 persons per diem, at a total cost of £2966. A sum of £2011 was also advanced to cultivators for the purchase of seed and cattle. In the drought of 1868–69, when the neighbouring tracts suffered so severely, Máinpuri District escaped with comparative impunity. Rain fell in September, just in time to bring up the spring crops to three-fourths of their average yield; and though prices ruled high, in consequence of large exportations southward, there was no serious pressure of local scarcity. The highest quotation for wheat during the period of dearth was 9 *sers* 1 *chhatak* per rupee, or about 12s. 5d. per cwt. The value of canals in seasons of drought is well shown by the fact, that in 1868–69 the canal-irrigated area rose from an average of 54,016 acres to a total of 102,060 acres during the dry weather. In 1883–84 (an ordinary year), the

canal-irrigated area had increased to 126,725 acres. The communications of Máinpuri, added to its large and increasing irrigation system, are now probably sufficient to protect it from the extremity of distress in years of famine.

Commerce and Trade, etc.—The trade of Máinpuri is of the same rural character as that of the other Doáb Districts. The exports consist chiefly of cotton, grain, indigo, *ghí*, and miscellaneous agricultural produce; while the imports are confined to metals, English cloth-goods, sugar, pedlars' wares, tobacco, and rice. Cotton-thread is manufactured to a large extent, and there is some trade in bangles, *hukas* or pipes, inlaid woodwork, and similar fancy articles. The only industry carried on under European superintendence is the manufacture of indigo. Saltpetre is refined at several factories scattered over the District, which export considerable quantities of the finished crystal. The principal trading marts are Máinpuri, Sarsaganj, Shikohábád, Karhál, and Pharhá. Sarsaganj is noted for its trade in cattle, cereals, sugar, salt, cotton, and leather.

Means of Communication. — Máinpuri is thoroughly supplied with means of communication. The East Indian Railway runs for 23 miles through the south-western angle, with stations at Shikohábád and Bhadán; the navigable branch of the Ganges and Lower Ganges Canals supplies water-carriage to the central plateau; the natural highway of the Jumna skirts the District to the south, affording water communication for 66 miles; and good metalled roads connect all the principal towns and villages in every direction; total length of roads in 1884, 390½ miles.

There was 1 printing-press within the District in 1884. It printed only in the vernacular.

Administration.—The administrative staff of Máinpuri District consists of a Civil Judge, a Native Subordinate Judge, and 2 *munsifs;* a Magistrate and Collector, an Assistant Magistrate and Collector, and 2 Deputy Magistrates. There are also 5 *tahsíldárs*, who have both magisterial and revenue powers, and three Deputy Magistrates in the Canal Department; besides the usual educational, medical, and minor fiscal officials. The total revenue of the District amounted in 1875-76 to £127,616, which by 1883-84 had increased to £169,976. The chief items of revenue in the latter year were as follow:—Land revenue £129,057, stamps £14,430, excise £3220, provincial rates £15,173, assessed taxes £2250, registration £803. The total cost of the civil administration, as represented by the pay of officials and police in 1883-84, was £12,017.

In the year 1883-84 there were 14 magisterial and 14 civil courts in Máinpuri District. The regular police, including the town and municipal forces, numbered 534 men of all grades in 1883-84, main-

tained at a total cost of £5723, of which £4999 was paid from provincial funds, and £724 from other sources. They were supplemented by 1840 village watchmen or *chaukídárs*, the estimated cost of whose maintenance amounted to £6672. The whole machinery, therefore, for the protection of person and property consisted of 2374 officers and men, or 1 policeman to every 0·7 square mile and every 337 inhabitants; while the expenditure on the entire force amounted to £12,395, or 3½d. per head of the population. The jail and lock-up at Máinpuri contained an average number of 300·97 prisoners in 1883, of whom 9·25 were females.

Education has made considerable advances of late years in Máinpuri District. In 1860-61 there were 256 schools aided and unaided, with a roll of 5363 pupils, while the sum expended upon them amounted to £1860. By 1874-75 the number of schools of all kinds had increased to 328, the total of pupils to 6872, and the cost of maintenance to £3542. In 1883-84 there were 131 State-inspected schools in the District, attended by 4081 pupils, but no returns are available showing the number of private and uninspected indigenous schools in that year. The Census Report for 1881 returns 5492 boys and 153 girls as under instruction, besides 16,142 males and 287 females able to read and write, but not under instruction. The indifference of the powerful Ahír and Rájput tribes on the subject of education has proved a great barrier to its wider spread.

The District is divided into 5 *tahsíls* or Sub-divisions and 11 *parganás*. It contains only 1 municipality, MAINPURI; the revenue of which in 1883-84 amounted to £1491, while the expenditure was £1697; incidence of municipal taxation, 1s. 1¾d. per head of population.

Medical Aspects.—The climate of Máinpuri does not differ from that of the Doáb generally. It is warm, but not excessively sultry, during the summer months, and damp or foggy during the cold-weather rains. The average annual rainfall for a period of 35 years ending 1881 was 28·43 inches, the rainfall in 1881 being 43·50 inches, or 15·07 inches above the average. The lowest recorded rainfall was in 1868-69, the year of scarcity, when only 10·9 inches fell. No thermometrical returns are available. The chief endemic disease is malarial fever. The total number of deaths recorded in 1883 was 21,993, or 28·59 per thousand of the population; and of these no fewer than 18,216 were assigned to fever, while 2178 were the result of small-pox. This was an unusually healthy year, as the average registered death-rate for the five previous years was 35·73 per thousand. During 1883-84, 438 in-patients and 19,362 out-patients were relieved at the two charitable dispensaries of the District. [For further information regarding Máinpuri District, see the *Gazetteer of the North-Western Provinces*, by Mr. E. T. Atkinson, C.S., vol. iv. pp. 405-641 (Government Press, Allah-

ábád, 1876). Also the *Settlement Report of the District*, by Messrs. M. A. M'Conaghey and D. M. Smeaton, C.S. (1876); the *Census Report of the North-Western Provinces and Oudh* for 1881; and the several Provincial and Departmental Reports from 1880 to 1884.]

Máinpuri.—Central northern *tahsíl* of Máinpuri District, North-Western Provinces; comprising the *parganás* of Máinpuri, Ghíror, and Karauli, and consisting of an alluvial upland plain, intersected by the rivers Rind and Isan, and watered by the Cawnpur and Etáwah branches of the Ganges Canal. Area, 396 square miles, of which 178 square miles were cultivated in 1882. Population (1872) 176,897; (1881) 183,334, namely, males 101,783, and females 81,551. Classified according to religion, there were in 1881—Hindus, 171,197; Muhammadans, 10,529; Jains, 1481; 'others,' 127. Land revenue in 1882, £22,567, or including rates and cesses levied on the land, £25,275; rental paid by cultivators, £37,369; incidence of Government revenue per acre, 1s. 10d. In 1883 the *tahsíl* contained 3 civil and 6 criminal courts; 4 police circles (*thánás*), with a regular police of 71 men, besides 456 village *chaukídárs*.

Máinpuri.—Town, municipality, and administrative head-quarters of Máinpuri District, North-Western Provinces. Situated in lat. 27° 14′ 15″ N., and long. 79° 3′ 5″ E., on the Agra branch of the Grand Trunk Road, which connects the town with Shikohábád station on the East Indian Railway, distant 36 miles south-west. The town consists of two separate portions, Máinpuri proper and Mukhamganj. The former town existed, according to tradition, in the days of the Pándavas, and derived its name from one Máin Deo, whose image may still be seen in one of the suburbs. The Chauháns emigrated hither from Asauli in 1363, and built a fort round which a city sprung up. Rájá Jaswant Singh founded Mukhamganj in 1803. The civil station for Etáwah District (since separated) was placed at Máinpuri in 1802. Holkar plundered and burnt part of the town in 1804, but was repulsed by the local militia. Since the British occupation, the population has rapidly increased, and many improvements have been carried out in the town.

The population (1872) was 21,177; (1881) 20,236, namely, males 11,333, and females 8903; area of town site, 264 acres. Classified according to religion, there were in 1881—Hindus, 15,572; Muhammadans, 3822; Jains, 793; and Christians, 49. The Grand Trunk Road runs through the centre, and forms a wide street, lined on either side by shops, which constitute the principal *bázár*. At the eastern entrance stand the *tahsíli* and police station, while the dispensary and mission buildings lie a little off the road. Next comes Raikesganj, a large *sarái* and grain market, built by Mr. Raikes about 1849. The Etáwah road runs north and south, crossing the Grand Trunk Road;

and aids much in ventilation. The Máinpuri portion of the town lies north of the Agra road, and contains many brick houses, beyond which lie pleasant gardens, stretching out to the Rájá's fort and old town. The main street in this quarter, which derives its name of Laneganj from a recent Collector, contains many shops, a market-place, bathing tank, and schools. The civil station stands on the opposite bank of the Isan river, crossed by a good bridge. Opium warehouses, jail, post-office, dispensary, *zilá* and *tahsíli* schools, American Presbyterian mission, church, reading-rooms, and 2 public gardens. Considerable trade in cotton, indigo seed, country produce, and iron. Manufacture of wooden articles inlaid with wire. Municipal revenue (1883–84), £1491; from taxes, £1312, or 1s. 1¾d. per head of population (22,736) within municipal limits.

Máinpuri town has but little modern history apart from that of the surrounding country. The local events of the Mutiny of 1857 have therefore been narrated in the article on MAINPURI DISTRICT.

Maipárá.—River in Cuttack District, Bengal; the southern outlet by which the waters of the Bráhmaní find their way into the Bay of Bengal, the northern being known as the DHAMRA. The Bánsgarh, a tidal creek of the Maipárá, runs southward, almost parallel to the coast, till it falls into the sea about 6 miles north of False Point Harbour. The mouth of the Maipárá presents the usual obstacles of bars and high surf; and from its position to the south of Palmyras promontory, it is inadequately sheltered from the monsoon. But from November to March, native craft from the Madras coast engaged in the rice trade frequent the river. Just outside the entrance to the Maipárá river lies a small island of the same name (lat. 20° 41′ 30″ N., long. 87° 6′ 15″ E.).

Mairwára.—Tract of country in Rájputána.—*See* MERWARA.

Maisaram.—Village in Haidarábád *táluk*, Nizám's Dominions; situated 10 miles south of Haidarábád city. The head-quarters of a

There are no manufactures; and though iron-ore exists, it is not regularly worked.

Maksudábád.—City in Bengal.—*See* MURSHIDABAD.

Maksúdangarh.—Petty State under the Bhopál Agency, Central India; a tributary of Gwalior. It lies on the right bank of the river Párbatí. Area, about 81 square miles, containing 78 villages; population (1881) 13,924, namely, 7620 males and 6304 females. Hindus numbered 11,841; Muhammadans, 449; and aboriginal tribes, 1634. Of these last, Bhíls numbered 320; Gonds, 41; Minás, 204; and Deswalis, 1069. The State contained 77 villages with less than one thousand inhabitants, and 1 village with from one thousand to two thousand. Revenue, about £3100. The chief products are opium and grain. The chief, Raghunáth Singh, is a Khichi

Majhauli is the Hindu, and Sálimpur the Muhammadan quarter. United population (1872) 4850; (1881) 5599, namely, Hindus 4437, and Muhammadans 1162. The more ancient of two villages is Majhauli, which rises on the north or left bank of the Little Gandak. Here is the residence of the Majhauli Rájás, the most important of the Hindu landed families of Gorakhpur, although from improvidence and continued bad administration, very little is now left of their former greatness, and they have been stripped of much of their ancient possessions. Majhauli also contains four Sivaite temples and a *parganá* school. In Sálimpur, on the opposite bank of the river, are an Imperial post-office, two mosques, and a *bázár*, at which markets are held every Wednesday and Saturday. For the sanitation and police protection of the united villages, a small house-tax is raised under the provisions of Act xx. of 1856.

Majhaura.—*Parganá* in Akbarpur *tahsíl* (Fyzábád) District, Oudh; bounded on the north by Amsin, on the east by Akbarpur and Aldemau, on the south by Aldemau and Sultánpur, and on the west by Pachhimráth *parganás*. Intersected by two small rivers, the Madha and Biswi, which unite at the village of Báizpur. The combined stream henceforward takes the name of the Tons. The point of confluence, known as Dohte, is considered a place of great sanctity, as having been the residence of a holy hermit in the time of the *Rámáyana*. An annual fair held here is attended by 5000 or 6000 persons. Area of the *parganá*, 129 square miles, of which 76 are cultivated. Population (1869) 45,203; (1881) 72,535, namely, males 36,847, and females 35,688. Trade insignificant, carried on in three small villages. Government land revenue, £9068, being at the rate of 3s. 9d. per arable acre. Of the 245 villages comprising the *parganá*, 159 are held under *tálukdárí* and 86 under *zamíndárí* tenure.

Majhgáon.—Town in Bánda District, North-Western Provinces.—*See* RAJAPUR.

repulsed by the local militia. Since the British occupation, the population has rapidly increased, and many improvements have been carried out in the town.

The population (1872) was 21,177; (1881) 20,236, namely, males 11,333, and females 8903; area of town site, 264 acres. Classified according to religion, there were in 1881—Hindus, 15,572; Muhammadans, 3822; Jains, 793; and Christians, 49. The Grand Trunk Road runs through the centre, and forms a wide street, lined on either side by shops, which constitute the principal *bázár*. At the eastern entrance stand the *tahsíli* and police station, while the dispensary and mission buildings lie a little off the road. Next comes Raikesganj, a large *sarái* and grain market, built by Mr. Raikes about 1849. The Etáwah road runs north and south, crossing the Grand Trunk Road;

the village of Kathú Nángal, a station on the Amritsar and Pathánkot Railway, four miles to the north.

by the Arabs. Ibn Batuta has Mulaibár; Marco Polo, Melibar.

Makhanpur.—Village in Bilhaur *tahsíl*, Cawnpur District, North-Western Provinces; situated in lat. 26° 54′ N., and long. 80° 1′ 20″ E., two miles off the road from Cawnpur city to Fatehgarh, 40 miles north-west of the former. Population (1881) 3055. The tomb of Madár, a Musalmán saint, annually attracts a large concourse of pilgrims. A large horse and cattle fair is held in February to March at the time of the *Holi* festival.

Makhi.—Town in Unao District, Oudh; situated 9 miles north of Unao town, with which it is connected by two unmetalled lines of road. Population (1881) 4521, viz. Hindus 4357, and Musalmáns 164. Two weekly markets. Small manufacture of pottery and silver ornaments. The village was founded about 1000 years ago by a Lodh chief named Makhi, who gave it his own name. After the Lodhs had been expelled, 400 years since, Rájá Isri Singh, from Máinpuri, took possession of the place, which is still owned by his descendants.

Makrái.—Petty Native State in Hoshangábád, District, Central Provinces. Area, 215 square miles, with 59 villages and 3380 occupied houses. Population (1881) 16,764, namely, males 8521, and females 8243; average density, 77·9 persons per square mile. Estimated gross revenue, £2200. The territory was formerly much larger, and included Kálíbhít and Chárwa; but the greater part was annexed by the Peshwá and Sindhia. The Rájá, who is a Gond, pays no tribute. He exercises civil, criminal, and executive jurisdiction, subject to the general control of the British Government. The succession is by primogeniture. Makrái itself (lat. 22° 4′ N., long. 77° 7′ 30″ E.) is an insignificant place, lying round a hill fort, which the Rájá inhabits; but there are some rich villages in the low-lying portion of the State. Wheat, gram, and rice, gum, *mahuá*, *chironjí*, and *archar* form the chief products. There are no manufactures; and though iron-ore exists, it is not regularly worked.

Maksudábád.—City in Bengal.—*See* MURSHIDABAD.

Maksúdangarh.—Petty State under the Bhopál Agency, Central India; a tributary of Gwalior. It lies on the right bank of the river Párbatí. Area, about 81 square miles, containing 78 villages; population (1881) 13,924, namely, 7620 males and 6304 females. Hindus numbered 11,841; Muhammadans, 449; and aboriginal tribes, 1634. Of these last, Bhíls numbered 320; Gonds, 41; Minás, 204; and Deswalis, 1069. The State contained 77 villages with less than one thousand inhabitants, and 1 village with from one thousand to two thousand. Revenue, about £3100. The chief products are opium and grain. The chief, Raghunáth Singh, is a Khichi

Rájput. The State has been under British superintendence since 1880.

United population [illegible]
and Muhammadans 1162. The more ancient of two villages is
District, Assam, on the Buri Dihing river, about 20 miles east of Jaipur. In the neighbourhood are valuable deposits of coal and petroleum. The bed of coal (which is of great thickness, being in one place 70 feet thick, with two small strata of shale intervening) has been traced for a distance of 13 miles; and it has been estimated that the marketable out-turn is 9 million tons. The quality is good, and water-carriage is readily available. In 1866, free grants for working both the coal and the petroleum were made by the Government to a Mr. Goodenough, who devoted much capital to the enterprise. But the undertaking was suspended some years ago on the death of that gentleman. A concession for working the mines was subsequently granted to a private association, the Assam Railway and Trading Company, on a 20 years' lease. A metre-gauge light railway has been constructed from Dibrugarh to Mákúm, a distance of 38½ miles, with a branch line to Sadiyá, and another branch to the head-quarters of the company's mining operations at Margherita. The line was opened in the middle of 1884, but sufficient time has not elapsed to show whether these fields can be worked so as to compete with Rániganj coal. The company has also a concession for the petroleum beds at and in the neighbourhood of Mákúm, but up to 1884 no steps had been taken for working the deposits.

Makúrti.—Peak in the Kúnda range, Nílgiri Hills District, Madras Presidency. Lat. 11° 22′ 15″ N., long. 76° 33′ 30″ E.; elevation above sea-level, 8403 feet. A favourite point for excursions. The ascent of Makúrti is by a zig-zag path cut on its eastern face. Its western face is an almost unbroken wall-like precipice, several thousand feet in depth. The spirits of men and buffaloes are supposed by the Todas to take a leap together into Hades from this peak.

Malabar.—British District in the Madras Presidency, lying between 10° 15′ and 12° 18′ N. lat., and between 75° 14′ and 76° 52′ E. long. Bounded on the north by the District of South Kánara; east by Coorg, Mysore State, the Nílgiris, and the District of Coimbatore; south by the Native State of Cochin; and west by the Arabian Sea. Area, 5765 square miles; population (1881) 2,365,035. The administrative head-quarters of the District are at CALICUT TOWN.

Derivation of Name.—The ancient name of the Malayálam country, including the Native States of Cochin and Travancore, was CHERA and KERALA; the latter term, by which a large portion of the tract has been known for centuries, being a dialectal (Kánarese) form of the more ancient name of Chera. The earliest mention of the modern name of *Malabar* or *Malayálam* ('the mountain region') is found in the Μαλε of the later

Greeks. Cosmas Indicopleustes (545 A.D.) speaks of 'Malé, whence the pepper comes.' The full name Mala-bar seems to have been given by the Arabs. Ibn Batuta has Mulaibár; Marco Polo, Melibar. Lassen explains the affix *bár* as from the Sanskrit *vara*, 'a region.' Bishop Caldwell prefers Colonel Yule's view, that the termination is the Persian *bár* (Arabic *barr*, suggested by Gundert) of Zanzibár; it is, however, perhaps ultimately identical with the final syllable of Márwár, Dhárwár, etc., 'continent,' or 'coast.'

Jurisdiction.—By the treaty of Seringapatam, concluded on the 18th March 1792, Malabar along with other tracts was ceded to the East India Company, and placed under the Bombay Presidency. Several chiefs who had been in quasi-political relations with the Company previous to the cession, were continued in the position of feudatories for a few years, and exercised more or less independent authority within their own limits. This led to difficulties culminating in the Kotiote Palassi (Pychi) rebellion. In 1796, a Commission was appointed, consisting of 4 members, with which the Supervisorship was incorporated. The feudatories were deprived of all administrative authority, their lands being secured to them in full proprietary right, and a special allowance (*malikána*) made to them. The two Superintendentships were abolished in 1800, and several European Collectors were appointed, one to every division or *táluk*. At the end of that year, Malabar was transferred to the Madras Presidency.

The Commission was finally abolished in September 1801, and the District placed under a principal Collector and 3 Subordinate Collectors, who are now respectively designated Sub-collector, Head Assistant Collector, and Special Assistant Collector. Besides these officers, there are now one or more European Assistants, one Deputy Collector in charge of the treasury at the *sadr* (head-quarters) station, and 3 Deputy Collectors in charge of the Wainád, Ponáni, and Cochin *táluks*.

In 1803, 2 *zilá* or District courts were established at Tellicheri and Calicut, with a provincial or circuit court presided over by 3 Judges, whose jurisdiction extended from North Kánara to Cochin. In 1827, the *zilá* court of North Malabar was converted into an auxiliary court, and one of the same designation established at Cochin. These courts were abolished in 1843, to make room for the civil courts. The District is now divided into 2 *zilás* of North and South Malabar, under 2 District Judges. A special Assistant Collector for the Máppillá country has his head-quarters at Malapuram, the military outpost; while a European Deputy Collector has charge of the mountainous *táluk* of Wainád, and resides at Mánantávádi (Manantoddy).

Physical Aspects.—Malabar is singularly diversified in its configuration. The great range of the Western Gháts, only interrupted by the

Palghát gap, looks down from the east on a country broken by long spurs, extensive ravines, dense forests, and tangled jungles. Stretching westward, gentler slopes, rolling downs, and gradually widening valleys, closely cultivated, succeed the forest-clad uplands. Nearer the seaboard, the low laterite table-lands shelve into rice plains and backwaters fringed with cocoa-nut palms. Numerous rivers have hollowed out for themselves long valleys to the coast, where, meeting the sea currents, they discharge into a line of backwaters.

The District extends along the coast for 145 miles; its breadth varies from 25 miles on the north to 70 miles on the south. The coast runs in a south-easterly direction, and forms a few headlands and small bays, with a natural harbour in the south at Cochin.

The seaboard is for the most part open and unprotected, except to the north-west, where stand the island and hill of Mount Dilli (885 feet), a bold eminence of laterite and gneiss, and a conspicuous landmark to mariners. In the south there is a considerable extent of table-land; but generally the fall of the hills is steep, with ledges of rocks along the crest. The rocks are chiefly gneiss, and the geological formation primary. The mountains of the WESTERN GHATS, varying from 3000 to 5000 feet above sea-level on the Coorg and Wainád slopes, and reaching 7000 and even higher on the Kúnda face, run almost parallel to the coast. Here and there they branch off to the westward, forming large valleys, while abreast of Calicut they recede to the eastward, and form with the Wayat Hills (Camel's Hump) the valleys of Ernád. On the north, the Gháts join the higher mountains on the western face of the Kúndas. The portion of the range eastward from the Kúndas, as far as the lofty mountains north of Palghát, is comparatively low; it encloses a tract of 200 square miles known as the Attapádi valley, where rise the headwaters of the Bhawání river.

Perhaps one of the most striking features in the country is the PALGHAT gap, a complete opening, some 25 miles across, in the great backbone of the Peninsula. Here, by whatever natural agency the break occurred, the mountains appear thrown back and heaped up, as if some overwhelming torrent had burst through, sweeping them to left and right. On either hand tower the giant Nílgiris and Anamalais, overtopping the chain of Gháts by several thousand feet; while through the gap the south-west winds bring pleasant air and grateful showers to the thirsty plains of Coimbatore. The unique character—as a phenomenon of physical geography—of this gap in an otherwise unbroken wall of high mountains, 600 miles long, is equalled by its economic value to the countries lying on either hand of it. Several *gháts* or passes connect the coast with Mysore, Coorg, the Wainád, and Cochin.

The District is intersected by many rivers and minor streams, navigable for a few miles above tidal influence, and all having their sources in the Western Gháts. The chief of these are — the Beliapatam (Valárpatanam), rising in Coorg, and falling into the sea below Beliapatam; the Darmapatam, rising in the Wainád; the Kota, navigable from the sea for a distance of 20 miles; the Máhe; the Beypur river, which breaks through the Gháts to the north of Karkúr in a long succession of cataracts, and enters the sea at Beypur; the Kadalvandi, and the Ponáni. The last-named river, flowing through a rocky country, is much broken by rapids; but in time of flood the volume of water is sufficient to float large timber down to the coast, a purpose for which this stream is largely used.

One of the most characteristic features of Malabar is the all but continuous chain of lagoons or backwaters lying parallel to the coast, which have been formed by the action of the waves and shore currents in obstructing the waters of the numerous rivers. Of these backwaters, the most important are—the Kavái and Beliapatam (Valárpatanam) in the north; the Payangádi, Quilandi, and Elatúr in the middle of the coast line; and the Chetwái and Kodungalúr in the south. There are two fresh-water lakes—one at Tánúr, comparatively unimportant; but the other, the Trichúr or Enámakal Lake, of great value, and deserving notice for the perpetual struggle of human industry against the forces of Nature, which the cultivation of its bed demands.

At the close of the rains, the water in this lake—which is protected from tidal influences by a dam—rapidly subsides, and every foot of ground is planted with rice seedlings, as soon as the flood recedes. As the dry weather advances, the bed of the lake presents a magnificent expanse of the most luxuriant crops. With the early thunder-storms of the south-west monsoon in April, commences the struggle with the slowly but steadily rising floods. The low earth-banks which enclose convenient areas are repaired, and numberless Persian wheels bristle in their wooden frameworks. Thousands of the population, including many Nair (Náyar) women of good caste, are seen perched high above the scene on these machines, continuing the day and night contest for the preservation of their crops. The bulwarks of the advanced fields are frequently breached, and the immature crop is drowned. Often a large area has to be reaped by simply heading the stalks from boats; but, as a rule, an enormously rich crop rewards this remarkable industry.

The inland navigation is so extensive that the trade of the country is in a great measure conducted by water. The chief commodities are firewood, rice, pepper, dry grains, country vegetables and condiments, jack, plantain, and mango. Teak and other timber and bamboos are floated down from Irikúr, the Anamalais, and Nilambúr to the coast

depôts. The affluents of the Cochin backwater also bring down timber for export from that town. The castes living by fishing number more than 16,000. No revenue has ever been derived from leasing fisheries, but a flourishing trade in fishcuring is carried on at the seaports. The value of the exports of salt-fish to Ceylon is about £17,000 per annum. The forests of Malabar are extensive and of great value, but they are almost entirely private property. The few tracts conserved have come into Government hands by escheat or by contract. Wild animals include elephant, bison, *sámbhar*, spotted deer, tiger, leopard, hog, Nílgiri ibex, hyæna, and bear. Small game is very abundant, and there are many varieties of fish.

History.—The early history of Malabar is inseparable from that of the adjoining State of Travancore. Identical in people, language, laws, customs, and climate, the whole seaboard from the Chandragiri river to Cape Comorin, and between the western mountains and the sea—the ancient Chera, in fact—is homogeneous in every respect, except in the accident of a divided political administration. To trace the successive waves—it may have been of invasion, or of peaceful colonization—which are now represented by the Cherumars, Tiyars, Nairs, and Nambúris, overlying one another in social strata, or to examine the physical justification for the legendary origin of this interesting country, is beyond the scope of this article.

But it is probable that the later flood of immigration, which gave to Kerala or Chera its Nairs (Náyars) and Nambúris, was part of a general movement southward, which in prehistoric times brought the best of its people, and its Bráhmanism, to Southern India. It is also likely that the physical formation of Kerala was due to some natural process —gradual or convulsive—which gave rise to the local legend of its having been the gift of the ocean. In very ancient times a traffic sprang up between the Mediterranean ports and the roadsteads of Malabar. The Phœnicians came by way of the Persian Gulf, and afterwards by the Red Sea. Possibly the Jews made the same voyage in the reigns of David and Solomon. The Syrians under the Seleucidæ; the Egyptians under the Ptolemies; the Romans under the Emperors; the Arabs after the conquest of Egypt and Persia; the Italians, more especially the Republics of Venice, Florence, and Genoa, have each in turn maintained a direct trade with the western ports of the Madras Presidency.

In the early political history of Malabar, the first figure that emerges distinctly from the mist of tradition is Cherumán Perumál, the last of the sovereigns of Chera. Cherumán Perumál is represented as voluntarily resigning his throne, sub-dividing his kingdom, and retiring to Mecca to adopt Muhammadanism. The date of Cherumán has been the subject of much discussion, but recently

information has been received that his tomb still exists at Safhai on the Arabian coast, and the dates on it are said to indicate that he reached that place A.H. 212 (A.D. 827), and died there A.H. 216 (A.D. 831). His departure from Malabar may possibly have taken place on 25th August 825, which is the first day of the Kolam era prevalent on the coast. The epoch usually assigned to him is about the middle of the 4th century. It is probable that, if the resignation and partition actually occurred, they were forced on the ruler by the growing power and turbulence of his feudatory chiefs, and by the encroachments of the western Chalúkya dynasty. From this time, Malabar remained divided among numerous small chieftains, of whom Kolattiri or Cherakkal in the north, and the Zamorin (or *Sámúri*) in the south, were the most conspicuous. It was with these last two, and with the Cochin Rájá, that the early Portuguese adventurers first entered into relations.

Vasco da Gama visited Malabar in 1498; and his successors speedily established themselves at Cochin, Calicut, and Cannanore. In 1656, the Dutch appeared in the Indian seas, to compete with the Portuguese for the trade of the country. They first conquered Cannanore; and in 1663 captured the town and fort of Cochin, as well as Tangacheri, from their rivals. In 1717 they secured the cession of the island of Chetwái from the Zamorin. But in the next half-century their power began to wane; Cannanore was sold to the Cannanore family (Bibi), represented at that time by Bamali Rájá in 1771; Chetwái was conquered by Haidar in 1776, and Cochin captured by the English in 1795. The French first settled in 1720 at Máhe; in 1752 they obtained a footing at Calicut, and in 1754 acquired Mount Dilli, and a few outposts in the north, all of which fell into the hands of the English in 1761. Their frequent wars with the English ended in the destruction of their commerce in the East, Máhe having been thrice taken and restored. The English had established themselves in 1664 at Calicut, in 1683 at Tellicheri, and by 1714 at Anjengo, Chetwái, and other commercial factories. Tellicheri became their chief entrepôt for the pepper trade; and so rapid was the extension of their power and influence, that in 1727 the English factors mediated a peace between the princes of Kánara and Kolattiri. They obtained the exclusive privilege of purchasing the valuable products of the country, viz. pepper, cardamoms, and sandal-wood.

For nearly a century the Maráthá pirates under Angria and other chiefs infested the coast, and ravaged even inland towns, by sailing up the rivers of Beypur, Ponáni, etc., till 1756, when they were destroyed by a British expedition. The Ikeri or Bednúr Rájá, in 1736 and 1751, invaded the country of Kolattiri, and imposed fines on the northern division. The Palghát State, after a dismemberment by the

Rájás of Calicut and Cochin, sought the alliance of Mysore, then ruled by its Hindu Rájá, who stationed a subsidiary force in Palghát. It was this connection which afforded Haidar Alí, when he became Regent of Mysore, a pretext for invading Malabar in defence of his ally, the Palghát Achchan. In 1760, Haidar sent an army to Palghát, and descended the *gháts* through Coorg, in person. Again, in 1766, at the instigation of Alí Rájá, the Máppillá chieftain of Cannanore, he made an easy conquest of the whole country, the Rájás flying into the jungles or taking refuge in the English settlement of Tellicheri. They, however, took advantage of the war between Haidar and the English in 1768 to reinstate themselves, until 1774, when Haidar again passed down the *gháts* with two armies, and completely subjugated the country, the Hindu chiefs retiring to Travancore and Tellicheri.

On war breaking out between the English and French in 1778, Haidar resented the asylum granted by the former to refugees in 1769, and commenced hostilities by investing the Tellicheri fort. The siege was prosecuted in a fitful manner for two years, till reinforcements arrived from Bombay, when it was raised by a sortie, whose success was so complete as practically to annihilate the besieging army. Peace intervened between 1784 and 1788, when Tipú Sultán, son and successor of Haidar, descended the *gháts*, and commenced a religious persecution of the people. This produced a rebellion; and on the breaking out of the war between him and the British in 1790, the refugee chiefs were encouraged by proclamation to join the British cause. The contest terminated in the cession of Malabar (except Wainád) to the Company by the treaty of peace dated 18th March 1792. The Commissioners appointed by the Bombay Government immediately reinstated the Rájás and chiefs in their possessions, and made a settlement with them for the revenue. The measures taken for the introduction of a civil Government have already been detailed; but for some years the peace was persistently broken by the Kotiote Rájá in the north, and by Máppillá leaders in the south. For ten years (1795–1805) these rebels and other turbulent chiefs kept the military regularly employed. Since that time, save occasional Máppillá outbreaks, the peace of the District has been undisturbed.

Máppillá outrages, which now generally originate in mixed motives, partly agrarian and partly fanatical, have long been a distinct feature in Malabar history. Lawlessness and violence had characterized the disposition and conduct of the inland Máppillás during the latter epoch of Tipú's ascendancy, and the earlier years of British rule; and successful measures of repression are associated with the name of 'Manjeri Watson' (so called from the military station he occupied), and his local Nair (Náyar) levies. The turbulent spirit, however, remained, and

incentives for its occasional outburst have not been wanting. The more recent instances have generally taken the form of resentment against some unreasonable Hindu (*Kafir*) landlord, or against hostile witnesses in our civil courts. The assassination of one of these surrounds the murderer with sympathizing co-religionists; and as, besides wreaking their fanatical vengeance on its primary object, they invariably contemplate selling their lives in a contest with the representatives of (in their eyes) an infidel Government, these outbreaks have assumed a serious aspect. The fatal resolve once taken, these pseudo-martyrs (*shahid*) meet in a sacrificial feast (*maulúd*), divorce their wives, and spend an interval in religious observances. Once they have struck the first blow, they set the law at defiance, often committing further murders, and burning and defiling Hindu temples and houses, till they encounter troops sent to repress them; upon these they throw themselves with the desperation of fanaticism, selling their lives as dearly as possible.

Experience has shown that native sepoys cannot be relied on to deal with these outbreaks with the firmness which the circumstances demand. A special police force organized in 1851 was also found unequal to the work. Since the very serious outbreak near Manjeri in 1849, when sixty-four fanatics were destroyed in hand-to-hand encounter with a detachment of H.M.'s 94th Regiment, the employment of European troops has been found necessary. The gallant Wyse, his *subahdár*, and others were killed on this occasion. In 1851, another serious disaster occurred at Kolatúr; and in the same year, a detachment of British infantry was established at Malapuram, the centre of the most menaced districts, which is still maintained. In 1852, the spirit of outrage spread to North Malabar; and a dreadful tragedy occurred at Mattanúr, near Tellicheri, involving the destruction of thirty to forty lives. In the following year, the 'Máppillá Outrage Act' was passed, providing a system of fining all the Máppillá inhabitants of the *amsams* in which outbreaks should occur; but, unhappily, it was not at once brought into force.

The fanatical Arab high priest or *tangal* of Tiruvangádi, Sayyid Fazl, was suspected of fomenting these outbreaks; and he certainly conferred his blessing on the murderous projects of his disciples (*muríds*). Under measures taken by Mr. Conolly, the Magistrate, in 1853, this man had to leave the country, never to return. Two years later, when Mr. Conolly was sitting in his verandah in the evening, a body of well-known fanatics, who had recently escaped from the Calicut jail, rushed in, and hacked him to pieces in his wife's presence. Then, for the first time, the Máppillá Act was put in force, and heavy fines exacted. Another serious outbreak (also at Kolatúr) occurred in 1873, when a gang, nine in number, charged a detachment of the 43rd (Queen's), and were all

shot down, and heavy fines were again imposed on the Máppillá inhabitants of the implicated *amsams*. Quite recently (1885) another serious outbreak occurred.

The *amsam*, though now the usual territorial subdivision of Malabar, is not of local origin; *nád* (country) and *desam* (village) are the local divisions of the coast Districts. The latter is in some respects the Hindu village, but the population of these Districts is not collected together in clusters of houses. Their dwellings are scattered over their cultivated land, along roadsides, and the like. On the introduction of the land revenue system after the Muhammadan conquest in 1784, the country was, after Mysore model, divided into *hoblis*. These were found too large for the English *ráyatwárí* and *tálukwárí* administration, and were divided so as to constitute 424 *amsams*, comprising upwards of 2000 *desams* or hamlets.

Population.—In 1802, the population was estimated at 465,594; in 1823, at 927,705; in 1837, at 1,165,489; and in 1861–62, at 1,709,081. In 1871, a careful Census disclosed a total of 2,261,250. The general Census of February 17, 1881, returned a total population of 2,365,035 persons, or 1,174,274 males and 1,190,761 females; so that in the period of nine years since the previous Census an increase of 103,785 persons, or 4·6 per cent., has taken place. The area of the District is 5765 square miles, distributed into ten *táluks* or Sub-divisions. The Census figures include the population of the Laccadive Islands, now attached to the District, but do not include their area.

Classified according to age, there were—under 15 years, males 487,332, and females 463,090; total children, 954,422, or 40·1 per cent. of the population: 15 years and upwards, males 686,942, and females 727,671; total adults, 1,414,613, or 59·9 per cent. of the population.

The following are the subsidiary statistical facts revealed by the Census. The density of population was 410 to the square mile in 1881, as compared with 377 in 1871. In this respect Malabar is the fourth most densely peopled District of the Presidency. The number of towns is 7; villages or *amsams*, 429; occupied houses, 404,968; unoccupied, 63,857. Towns and villages per square mile, 0·076; occupied houses per square mile, 70; persons per occupied house, 5·8, the Presidency average in this last respect being 5·5.

In regard to religion, the population is thus distributed—Hindus, 1,669,271, or 70·58 per cent.; Muhammadans, 652,198, or 27·5 per cent.; Christians, 43,196, or 1·82 per cent.; Jains, 157; Buddhists, 54; Jews, 30; Pársís, 46; and 'others,' 83. Hindus since 1871 have increased 1·9 per cent.; Muhammadans, 12·1 per cent.; and Christians, 3·73 per cent.: 82 per cent. of the Christian population are Roman Catholics. The remarkable increase in the case of the Muhammadans

is largely owing to the quickly-spreading conversion of low-caste Hindus to the tenets of the Hindu-sprung Muhammadans, the Máppillás. The inferior caste of Cherumárs, numbering 99,009 in 1871, are in particular disposed to accept 'the honour' of Islám in order to raise themselves in the social scale. They have decreased since 1871 by 34·63 per cent., instead of the increase of 5·71 per cent. observed generally in the District. Nearly 50,000 Cherumárs and other Hindus have joined Muhammadanism. This tendency of low-caste Hinduism to embrace the more liberal forms of Muhammadanism is not confined to Malabar or even to the Madras Presidency. The Europeans of the District are returned at 1558 and the Eurasians at 1524, but these numbers are certainly understated. The majority of the Hindus, in the proportion of 120 to 1, profess the Sivaite as opposed to the Vishnuite faith. The Sivaites numbered 1,627,651, and the Vishnuites 13,588.

Distributed according to caste, the Hindus include Bráhmans, 47,683; Kshattriyas (warrior-caste), 1509; Shetties (traders), 22,044; Vellálars (agriculturists), 348,169; Idaiyars (shepherds), 4991; Kammálars (artisans), 90,051; Kanakkan (writers), 890; Kaikalar (weavers), 42,606; Vanniyan (labourers), 50,624; Kushavans (potters), 11,770; Sátánis (mixed castes), 7627; Shembadavan (fishermen), 16,191; Shánán (toddy-drawers), 572,231; Ambattan (barbers), 13,902; Vannán (washermen), 37,556; 'others' (Pariahs, unspecified, etc.), 401,427. The Muhammadan population is thus distributed in tribes—Arabs, 246; Lubbais, 318; Máppillás, 495,248; Patháns, 2916; Sayyids, 124; Shaikhs, 44; and other Muhammadans, 153,302.

As regards occupation, the Census distributes the male population into the following six main groups:—(1) Professional class, including State officials of every kind and members of the learned professions, 37,137; (2) domestic servants, inn and lodging-house keepers, 5793; (3) commercial class, including bankers, merchants, carriers, etc., 49,267; (4) agricultural and pastoral class, including shepherds, 359,950; (5) industrial class, including all manufacturers and artisans, 216,645; and (6) indefinite and non-productive class, comprising all persons of unspecified occupation, male children, and general labourers, 505,482. Nearly 47 per cent. of the population are returned as workers on whom the remainder depended. Of the male population, 59·43 per cent., and of the female 34·73 per cent., were workers.

The arrangement of the towns and villages of Malabar is different from that in the other Districts of the Presidency. The *amsam* or parish is the unit of distribution, and of these *amsams* there were in 1881, exclusive of five in the Laccadive Islands, 424. The Census of 1881, treating the *amsam* as a village, including the five municipal towns of the District, the towns of ANJENGO and TANGACHERI, and

five *amsams* of the Laccadive Islands, and excluding the Karar limits of Cannanore, and the two *amsams* of Kacheri and Nagaram which have been included in the returns as within the municipal limits of Calicut, affords the following figures :—Villages or *amsams* with less than two hundred people, 1; with from five hundred to one thousand, 1; from one to two thousand, 15; from two to three thousand, 35; from three to five thousand, 174; from five to ten thousand, 195; from ten to fifteen thousand, 10; from fifteen to twenty thousand, 1; from twenty to fifty thousand, 3; and with more than fifty thousand, 1. The five municipal towns of the District contain 161,918 persons, or 6·8 per cent. of the whole population of the District.

The early history of the Máppillás (converts to Islám from various castes), like that of the Labbais of the eastern coast, is not accurately known. The best account is given in the Tahafat-ul-Mujáhidín, written in the 16th century. It corroborates the traditions current on the coast, of Cheramán Perumál's conversion to Islám, of his setting out for Mecca, of his landing at Shahr on the Arabian coast, of his proceeding thence to Safhai, where he died. Before his death he had papers prepared and directed to the chiefs of Malabar; and with these credentials, Malik Ibn Dinái set sail for the coast, and was received cordially by the chiefs to whom the letters were addressed. The first mosque is said to have been erected at Kodangallúr (Cranganore), the late Perumál's head-quarters; the next at Kollam (Quilon) in Travancore; the third at Mount Dilli (probably Payangádi), the head-quarters of the Kolattiris. The two mosques next erected are said to have been at Barkur and Mangalore (both in the present District of South Kánara). The sixth was placed at Jaifattan (named by Ibn Batuta 13th century A.D.), which is believed to be the place now known on the maps as Surrukundapuram in the Cherakal *táluk* of Malabar. The seventh was built at Darmapatam near Tellicheri; the eighth at Pantharini, or the northern Kollam, near the modern Quilandy; and the ninth and last at Chaliam, close to the Beypur terminus of the south-west line, Madras Railway. Some of these mosques still retain their ancient endowments.

It was the policy of the Zamorin to encourage trade with foreign countries; and in course of time the settlers, their descendants and converts, became a power in the land. Hindus found an easy refuge from their own stringent caste laws, which debarred them from seafaring pursuits, in the open arms of Islám. It is known, from the Dutch records, that in the 16th and 17th centuries the Zamorin encouraged the work of conversion. From the Moslem ranks alone could his war-boats be manned, and change of faith was the simplest means of providing sailors to cope with the Portuguese at sea. When this political need had passed away, the Máppillas remained and increased,

adding much by their industry to the material wealth of the country, and not a little to its social and political difficulties. To the arrogance of the strictly honest and austerely religious Vellálar or Nair, the Máppillá—ignorant, bigcted, priest-ridden—opposed fanatical hatred, and, when driven beyond bearing, open outrage and murder. Things are better now than they were. English rule has done much; the sword perhaps something; but more than all has special legislation contributed to bring about outwardly peaceful relations between the two classes. But the relations between Nair (Náyar) landlord and Máppillá tenant are still in many localities most unsatisfactory. They present features not without anxiety for the future.

The marriage customs of the Nairs are in many respects peculiar. For a long time it has been supposed that polyandry was a national practice among them; but a recent writer on Malabar law and custom asserts that although the issue of a Nair (Náyar) marriage are still children of their mother rather than of their father, polyandry is almost extinct, and marriage may be defined as a contract based on mutual consent and dissoluble at will. He states that it has died out in North Malabar, and only traces of it are found in South Malabar. It still survives in parts of Cochin and Travancore. In Malabar the form that exists is found only where Bráhman or Nambúri influence is strong, namely, in Nedunganád or Cherpulsherri. Even there no woman has more than two husbands; in Travancore she may have several. Formerly there was no difference as regards number between Native States and British Malabar, and a Malayálam drama is extant which describes with great humour the quarrels between the five husbands of a Nair lady in British Malabar, and their subsequent reconciliation.

Of such a woman the *tarwad* (or residence of all the descendants in the female line from a common ancestor) is the home. Here she receives any man she pleases, the only restriction being that her lover should not be of lower caste than her own. In British Malabar two brothers never marry the same woman—a connection thought not incestuous among the polyandrists of Tibet; neither may a man marry his deceased brother's wife on pain of expulsion from caste; nor may he marry two sisters. In North Malabar, the *tarwad* women generally live with their husbands throughout the year, only occasionally visiting their *tarwad* homes. In South Malabar, among the less wealthy families, the women live with their husbands for only half the year, spending the other half in the *tarwad* home. In the case of a Rájá or petty chief, the wife does not leave the *tarwad* at all. She is visited there by the husband. The Nairs maintain an extraordinary respect for relationship by descent through females. Caste excommunication would inevitably follow marriage between the children of

sisters, or indeed between relations in the female line who are members of the same *tarwad*.

Christians.—A full account of Christianity in Malabar and Southern India will be found in volume vi. of this work. The native Christians of Malabar now comprise four classes:—(1) Jacobites or Syrians; (2) Roman Catholics of the Syrian rite; (3) Roman Catholics of the Latin rite; (4) Protestants. The Christian Church of Malabar was founded in the first centuries of our era, by missionaries and traders from Babylonia or the Red Sea. Until the end of the sixteenth century it professed the Nestorian faith, obtained its Bishops from Persia, and acknowledged the supremacy of the Patriarch of Antioch. A series of forcible attempts at conversion by the Portuguese ended with the Synod of Diamper in 1599, and the inclusion of the Malabar Christians within the fold of Rome. Half a century later, the Malabar Christians threw off the papal allegiance. After a period of confusion, a section of them obtained a Jacobite Bishop from Asia: their descendants are the Malabar Syrian Jacobites of the present day. Another section were won back to Rome by the efforts of Carmelite friars, and became the Roman Catholics of the Syrian rite. The Roman Catholics of the Latin rite are the descendants of converts made from the native religions by the Jesuits and Carmelites. The Protestants chiefly date from the labours of the Basel mission. The work of the Jesuits in Southern India has been fully narrated in volume vi.

The Carmelite mission was founded by that Order in 1656. The work of the Carmelites was taken up afresh by the Jesuits in 1879. Nearly the whole of Malabar forms part of the jurisdiction of the Bishopric of Mangalore, while the remainder is under the See of Verapoli (Varápula), an inland village of Travancore. Besides primary schools, the Christian Brothers have three convents—at Cannanore, Calicut, and Cochin. From Cochin to Kavái, in the north, there are native Catholic communities, whose chief occupation is fishing and cultivating vegetables. The Protestant Basel Mission, established in 1839, has founded churches and schools at Cannanore, Tellicheri, Calicut, and Palghát, with branch establishments at Chombála, south of Tellicheri, and Kodakál, near Vettattapudiangádi. A steady increase is observable in the native Christian population; thus in 1856–57, it was 23,614; in 1861–62, 27,539; in 1866–67, 30,435; and in 1871–72, 41,642. The Census Report of 1881, however, returns the number of native Christians at only 20,172. Under the heading 'not stated,' there are 19,942 Christians, and of these no doubt a considerable proportion are native converts.

There are 5 municipalities in Malabar—namely, CANNANORE, the most northern seaport, and a military cantonment, with a population (1881) of 26,386; TELLICHERI, 26,410; CALICUT, the capital, with

57,085 inhabitants; COCHIN, 15,698; and PALGHAT, the largest inland town of Malabar, 36,339,—all of which see separately. The income from taxation of the five municipalities in 1883-84 amounted to £9782; the incidence of taxation varied from 6d. to 1s. 4½d. per head of population. Other towns and villages of importance are also described in separate articles, but the populations given of these places are not those of the actual towns and villages, but of the *amsams* or parishes in which they are respectively situated.

Forests.—Malabar District is divided into two forest divisions, each under a District forest officer. One consists of Wainád and Palghát, and the other of the Nelambúr teak plantations and the surrounding natural forests. The most important forests are those of the Wainád, which contain teak, backwood or rosewood (Dalbergia latifolia), *vengai* (Pterocarpus Marsupium), *karamarad* (Terminalia tomentosa), red and white cedar, and large quantities of trees of superior description. In the forests of Wainád, the *pun* (Calophyllum tomentosum) and the black and white dammer trees (Canarium strictum and Vateria indica) are noticeable features. The Palghát forest contains fine timber trees similar to those enumerated in the forests of Wainád, to which may be added *irumbogam* (Hopea parviflora), the Indian guttapercha tree, the iron-wood (Xylia dolabriformis), benteak (Lagerstrœmia microcarpa), coppice teak, blackwood, Acacia, Albizzia, and Zigyphus. The chief feature of the Nelambúr forest is the magnificent teak plantations, which extend over 3368 acres, have cost £111,904, yielded £85,577, and will, it is estimated, be worth £900,000 in 1900. Experimental planting of the mahogany, Cedra, Hevea, Landolphia rubbers, Ipecacuanha, *sappan*, and several varieties of bamboo has been undertaken with fair prospect of success. The forests are rich in minor produce—cardamoms, ginger, cinnamon, dammer, gums, resins, gall-nuts, honey, wax, etc. The area of reserved forests at the close of 1882-83 was 3524 square miles. During 1882-83 the total expenditure amounted to £5156, and the receipts to £9371.

Agriculture.—The statistical returns of 1883-84 disclose that 938,026 acres were cultivated, of which 110,293 were twice cropped; and 2,856,362 acres were cultivable. The area assessed was 803,558 acres; the assessment amounted to £181,716. Cereals occupied 597,525 acres, of which 581,085 acres were under rice; pulses, 9794 acres, of which 4152 acres were under peas; orchard and garden produce, 279,737 acres; drugs and narcotics, 28,647 acres, of which 26,822 acres were under coffee; condiments and spices, 12,807 acres, of which 7044 acres were under pepper and 4122 acres under ginger; sugars, 291 acres, of which 280 acres were under palm or palmyra; oil-seeds, 9174 acres, of which 8006 acres were under gingelly; and fibres occupied 51 acres. Rice (*ari*) forms the staple crop of the

District, and is also largely imported. *Ragí* and *chánna* are grown, but not largely; gingelly seed, castor-oil seed, gram of several kinds, coffee, pepper, ginger, cardamoms, garlic, cocoa-nut, areca-nut, and cinnamon are the chief products.

As soon as the first showers have fallen in March or April, agricultural operations commence. The fields are manured after a slight ploughing with ashes, leaves (decayed and green), and in some places salt mud. No system of irrigation is practised beyond diverting over the fields the stream flowing down each valley. Some of the most fertile lands in the District are thus brought under 'wet' cultivation. But the abundant and never-failing rainfall places the Malabar farmer beyond the necessity of artificial irrigation. Rice is sometimes sown broadcast, but is usually transplanted from nursery beds. The first or *kanni* crop is sown in April and May, and cut in August and September. The second or *makaram* crop is sown in September and October, and reaped in January and February. These are the principal rice harvests, but there are intermediate crops in some places; and a third, known as *punja*, is sown in February, and reaped in April or May. The greater portion of the land, however, bears only one crop. Within the last twenty years, rice cultivation has considerably extended, but very little improvement has taken place in the quality of the rice, although experiments have been tried in the District with Carolina seed.

Cocoa-nut gardens form one of the greatest sources of commercial wealth in the District. The value of exported cocoa-nut products is estimated at nearly a million sterling annually. Pepper and spices yield over a quarter of a million. Of 'dry' cultivation, rice grown on the uplands, oil-seeds (*ellu*), *ragí* (Eleusine corocana), and various pulses are the most extensively grown. The *ellu* (Sesamum indicum) and *modan* are subject to a special land-tax. *Punam* (elsewhere known as *kumari* or *júm*) cultivation, by burning the forests, is taxed on the area cultivated; and coffee land in the Wainád pays 2 rupees (4s.) per acre.

In 1881, the agricultural population of Malabar District was returned at 575,499, or 24 per cent. of the total. Amount of Government assessment, including local rates and cesses, £212,378, or an average of 5s. 2¼d. per cultivated acre. Total amount of rent actually paid by cultivators, including rates and cesses, £217,479, or an average of 5s. 3d. per cultivated acre. In 1882, the prices of produce were as follows, per *maund* of 80 lbs.:—Rice, 5s.; *ragí*, 3s. 10d.; maize, 2s. 1½d.; gram, 5s. 8¼d.; wheat, 8s. 5d.; pepper, £1, 19s. 10d.; salt, 5s. 8d.; sugar, £1, 5s. 4½d.; gingelly, 9s. 4d.; oil-seeds, 6s.; coffee, £2, 6s.; tobacco, £1, 4s.; cotton, £1, 16s. 3d. The agricultural stock in the same year was—horned cattle, 858,106; goats, 58,543; sheep, 1175; pigs, 820; elephants, 401; horses and

ponies, 846; donkeys, 265; ploughs, 162,378; carts, 5442; and boats, 3290.

The peasantry of Malabar are no exception to the general rule dividing this class into those who borrow and those who lend. The borrowers among the actual cultivators are much more numerous than the lenders; and borrowing, owing to certain characteristics in the prevailing tenure, is rapidly on the increase. The wages of artisans and labourers have been steadily rising. Coolies, who in 1800 earned 1½d., and in 1850, 3d., made in 1876-77, 7½d. a day; and skilled workmen, whose wage in 1850 varied from 7½d. to 9d., earned in 1876-77 from 1s. to 1s. 3d. In 1882-83, the rates were, for skilled labour, as low as 8¼d., and for unskilled, 4¼d. Agricultural labourers are always paid in kind, at the daily rate of about 5 lbs. of rice for a man and 4 lbs. for a woman.

Coffee and Tea Plantations.—In 1797, a plantation was opened by Government on the waste lands at Randattarra, a small tract lying between Cannanore and Tellicheri, for the cultivation of special products, such as coffee, pepper, cinnamon, cassia, cotton, sugar-cane, etc. The cinnamon plantation, the only one in the District, is still in existence; but the estate was laid waste by the Palassi (Pychi) rebels in 1803, and was subsequently sold by the Company. After the termination of the rebellion in 1805, and the pacification of the country, the Sub-Collector, Mr. H. Baber, turned his attention to coffee-planting in Wainád; and by 1840, this important industry was fairly established. Since 1850 it has increased greatly, and continues to prosper. In 1883 the coffee plantations numbered 13,568, covering 52,965 acres, of which 23,919 acres were under mature plants, 2903 acres under immature plants, and 26,143 acres were taken up for planting but not yet planted. The approximate yield was 3,813,958 lbs., or an average of 159 lbs. per acre of mature plants. The cultivation of tea has recently been introduced into the District. In 1883 the tea-gardens numbered 5, covering an area of 66 acres, of which 62 were under mature plants; the yield was 1860 lbs., or an average of 30 lbs. per acre of mature plants.

Land Tenure.—Until recently the opinion prevailed that all land in Malabar was, by immemorial inheritance, private property in fee-simple (*janmam*); and that no more absolute proprietary right, or more indefeasible title, could well be conceived than that of the Malabar *janmi.* An inquiry, however, since made by a Commissioner specially deputed to investigate the grievances of the Máppillá tenants, has revealed the fact that the Malabar proprietary right, supposed to be vested in the *janmi*, is to a great extent a creation of the British courts of justice. Fee-simple titles according to European ideas did not exist before the advent of the British. The people lived divided into

classes, of whom the *janmis* corresponded pretty nearly to the *zamíndárs* of the rest of India. They were entitled to their fixed customary share of the produce and to no more. The real power in the land was vested at that time in the *nád kúttams* or popular assemblies; and it was on the content and well-being of the classes beneath him, that the *janmi* relied for his wealth and position. If the *janmi* provoked the enmity of his *kánakkárs* (supervisors or protectors), they simply transferred their allegiance, and also the *janmi's* customary share of the produce, to some one else. This often happened, and the idea that the *kánam* holder had a right to do so has not yet even quite died out. The courts at the same time preserved the principle, that a holder subordinate to a *janmi* was entitled to compensation for improvements, if evicted from his holding. Such subordinate holders, even the meanest and lowest of them, have still also the power to subdivide, sublet, or sell the whole or portions of their holdings. These two principles have descended to them from the ancient local organization, in which classes or castes were told off each to perform certain well-understood customary functions in the body politic. In the exercise of these functions they were allowed the greatest possible liberty, and could sell amongst themselves the fruits of their labours.

Below the *janmam*, or proprietary right, as now understood by the courts, numerous sub-tenures of graduated value are found—from a permanent leaseholder on a peppercorn rent to a rackrented tenant-at-will. There are many varieties of these tenures, each with its own name and conditions; and they are all confirmed by documents of traditional form. But the system is changing now.

Natural Calamities.—The District has hitherto enjoyed immunity from extensive natural calamities, such as blight, flood, or drought; and such a disaster as an entire failure of the south-west monsoon has been unknown to the present or preceding generation. When, however, the neighbouring Districts to the east suffer from scarcity, as in 1866–67 and 1877–78, Malabar, which ordinarily disposes of some of its produce in exchange for grain, is affected by the prevalence of high prices. Scarcity was felt in 1866 in the early part of the year, when the prices of all articles of food rose abnormally high. Towards the end of 1876, owing to the scanty fall of rain, the season was most unfavourable; and there was a serious failure of the *makaram* or second rice crop, which, with the demand from outside, materially affected prices, though the import trade in grain was unusually active in supplying, not only Malabar, but (through Malabar) several of the famine-stricken Districts to the eastward.

Means of Communication.—The District is fairly supplied with main lines of communication. In 1882–83 there were 1574 miles of good made roads, 587 miles of navigable river, and 50 miles of navigable

canals. An extensive seaboard, with backwaters running parallel to it, affords easy means of transit. The artificial canals made to connect these backwaters give a continuous water communication along the coast of 77 miles in length from Cochin to the Tirúr station on the south-west line of the Madras Railway, of 43 miles in length from Beypur to Badagara, and again of 22 miles from Beliapatam to the frontiers of South Kánara. The Sultán's canal, connecting the Kavái and Pyangádi rivers, is about 2 miles long, cut through low rice ground. It was made by Alí Rájá of Cannanore, when he had the management of the Cherakál country under Haidar Alí in 1766, to secure inland navigation from the village of Kakád, 2 miles north-east of Cannanore, to Nileshwar in South Kánara. Previously all boats had to round Mount Dilli, a route impracticable during the monsoons. The canals are on an average between 10 to 12 feet broad, and 1 or 2 to 3 and 4 feet deep at low water, and are intended only for small boats. None of them is in a state of efficiency at all times, and 8 miles of cutting are required to connect the Tánúr Canal with the Kadalvandi and Beypur rivers. It is, however, in contemplation to complete a good navigable canal from Tirúr to Cochin, and push the work on eventually from Badagara to Máhe, Tellicheri, and Cannanore. The south-west line of the Madras Railway traverses the southern part of the District for a total distance of 90 miles, from Wálliár to Beypur.

Manufactures and Trade.—Except the manufacture of cloth, tiles, bricks, etc., in the German mission establishments at Calicut and Cannanore, and that of coarse cloth and mats at Palghát, there are no local manufactures deserving of mention. The weaving of calico, which derived its name from Calicut, seems to have altogether died out, while unsuccessful attempts have been made to manufacture canvas at Beypur, and silk at Palghát. The trade of the District is carried on chiefly at permanent markets; and the principal seats of commerce are CANNANORE, TELLICHERI, BADAGARA, CALICUT, PALGHAT, and COCHIN. The annual average value of imports for the five years ending 1882–83 into the eleven ports of Malabar was £1,434,869, and of exports, £2,699,159; giving a total annual average value of sea-borne trade, £4,134,028. In 1882–83, the value of imports was £1,449,183, and of exports, £2,693,564; total value of sea-borne trade, £4,142,747. No native banking establishments exist in the District; but every Malayáli is either lender or borrower, and the trading community readily avail themselves of the European banks at Calicut, Cochin, and Tellicheri. The pepper trade is older than the Arabian Nights, and probably dates from before the Christian era.

Administration.—Malabar has been, from time to time, subject to certain special revenue arrangements, including a tobacco monopoly,

a land-tax on pepper, and a Government farm of cardamoms, gold washing, and the like. All these have now been abolished. The tobacco monopoly, which lasted for forty-six years, and yielded at one time £80,000 per annum, was given up in 1853, as it led to much smuggling, lawlessness, and loss of life. The pepper land tax was surrendered in 1806, as the spice already paid a very heavy transit duty, which was abolished in 1846; and the minor farms followed in 1868.

In 1882, the gross revenue of the District was £282,732. The principal source of revenue is the land-tax, which yielded in 1860-61, £175,137; in 1870-71, £191,832; and in 1882-83, £183,831.

The judicial courts consist of the 2 District courts of North and South Malabar, 3 sub-courts, 18 District *munsifs'*, 1 District Magistrate's, 2 Joint Magistrates', 3 Assistant Magistrates', 4 Deputy Magistrates', 32 Sub-Magistrates' (including *táluk sheristadar* Magistrates), and 5 Benches of Magistrates. The average distance of each village from the nearest court is 17 miles. There is a central prison at Cannanore, besides 3 District jails, at Tellicheri, Calicut, and Cochin, and 22 lock-ups. At Cannanore prison in 1882 the daily average jail population was 603. At the District jails 1220 prisoners were received during the year. The chief District jail is at Cochin, and here in 1882 the daily average of prisoners was 222·3. The total cost of the jail department to Government in 1882-83 was £7492. The aggregate strength of the police in 1882 was 1407 men, costing £23,809, giving 1 constable to every 4 square miles and to every 1680 inhabitants.

In 1874-75, the District contained a total of 473 schools, with 21,351 pupils. In 1882-83, the number of schools, Government, aided and unaided, was 941, and the average number of scholars, 39,327. Of these schools, 41 were for girls, with 1388 pupils. The Census of 1881 returned 45,532 boys and 9550 girls as under instruction, together with 115,072 males and 20,009 females able to read and write. The high-class institutions are the Government College at Calicut, the Brennen Zilá School at Tellicheri, the Palghát High School, and the 'Kerala Vidya Sala,' recently established by the Zamorin, for the instruction of the young noblemen of his family, and of other influential persons in the District. Nearly 200 schools are exclusively confined to Máppillás. There are 14 printing presses at Calicut, Tellicheri, Mánantavádi, and Cochin, and at the latter town are published two English and one Malayálam newspapers.

Medical Aspects.—Malabar, like the rest of South-Western India, is characterized by a heavy rainfall, a humid climate, and a moderate temperature. The south-west monsoon sets in early in May, bringing with it heavy clouds, which bank up against the Ghát range. This is the hottest time of the year; the air is close and heavy and

frequently overcharged with electricity. Early in June 'the monsoon breaks,' and for three to four months the rains are frequent, heavy, and often continuous for several days. The rainfall in June, July, and August averages 80 inches, or two-thirds of the total fall for the year. The temperature improves, and the climate during the rains is pleasant and healthy. During the six years ending 1881-82, the average rainfall was 156·6 inches, of which 136·4 inches were brought by the south-west or early monsoon, and 20·2 inches by the north-east monsoon. By October the rains have slackened, and the north-east monsoon sets in, bringing cool breezes from the wet table-land of Mysore and Coorg, and reducing the temperature. In December the thermometer sometimes falls to 60° F. in the shade. The hot weather commences as the north-east monsoon fails (about February), and continues till May. In March and April there are frequent thunderstorms, betokening the coming of the south-west monsoon. The thermometer in the hot weather rises to 93° F. in the shade. The maximum in 1881 was 93·80; and the minimum in the same year, 65·4°. On the whole, the climate is healthy. The principal diseases are small-pox, dysentery, and fever. The registered death-rate, not a very trustworthy source of information, was in 1882-83, 18·1 per thousand; the registered birth-rate, 23·8 per thousand. Cattle suffer from murrain and foot and mouth disease, but no epidemic rinderpest has been recorded. [For further information regarding Malabar, see Dr. Francis Buchanan's *Journey through Mysore, Kánara, and Malabar* in 1800-1801 (2 vols., second edition, Madras, 1870); *Report on the Land Tenures of Malabar*, by R. Logan, Esq., C.S.; the *Madras Census Report* for 1880-81; and the several Administration and Departmental Reports of the Madras Presidency from 1880 to 1884.]

Málágarh.—Village in Bulandshahr District, North-Western Provinces, belonging to the Nawáb of Chhatári. Distant from Delhi 38 miles south-east; from Bulandshahr town 4 miles north. Large grain depôt; village school. Formerly known as Rathora, and owned by Gaur Rájputs. Population (1881) 1657. Before the Maráthá supremacy, Hakdád Khán, Amíl of Baran, purchased the Rájput rights, built a mud fort and market, and changed the name to Málágarh, in honour of a local Muhammadan saint. The Maráthás occupied the place in 1792. On the British occupation, Mádhu Ráo, the Maráthá *jágírdár*, opposed the new Government, and ordered Colonel Skinner to leave the *jágír*. Skinner refused, and the Maráthá leader attacked him, but was repulsed with the loss of almost all his infantry. Skinner next invested the fort, and Mádhu Ráo surrendered. Bahádur Khán, son of Hakdád Khán, then received from the British Government a lease of this and 35 other villages, which lapsed on his death in 1824. His son, Walidád Khán, obtained a small allowance, which he held

till 1857. Meanwhile, Walidád's niece had married a son of the King of Delhi; and on this account, when the Mutiny broke out, he was appointed *subahdár* of Baran (Bulandshahr) and Koil (Alígarh) by the rebel king. Walidád Khán proved one of the most turbulent and dangerous insurgent leaders; but on the fall of Delhi, Colonel Greathed's column defeated his forces, and razed to the ground the fort of Málágarh. During the operations necessary for blowing up the walls, Lieutenant Home, the hero of the Kashmír Gate at Delhi, lost his life: his tomb is in the Bulandshahr cemetery.

Malai-soh-mat (or *Malaichamat*).—Petty State in the Khási Hills, Assam. Population (1881) 450; revenue, £35, chiefly from dues on lime-quarries. The presiding chief, whose title is *siem*, is named U Shongnam Singh. The principal products are rice, millet, *tezpát* or bay-leaves, ginger, chillies, turmeric, betel-nut, and oranges. Limestone is quarried, and mats are manufactured.

Málanchá.—Estuary in the District of the Twenty-four Parganás, Bengal. One of the principal arms of the Bay of Bengal. Lat. 21° 42′ N., long. 89° 26′ E. This name is given to the combined stream of the KABADAK and KHOLPETUA as it approaches the sea. The Málanchá is situated from 4 to 6 miles eastward of the RAIMANGAL estuary, and has a channel running to seaward in a south-westerly direction, with a depth of 6 or 7 fathoms near the land, decreasing to 3½ or 4 fathoms. The yet unfathomed 'Swatch of No-ground' lies due south of this river.

Malangarh (*Báwa Malang*).—Hill fortress in Thána District, Bombay Presidency; situated 10 miles south of Kalyán. Known also as the Cathedral Rock. Like most of the chief Thána hill forts, Malangarh rises in a succession of bare stony slopes, broken by walls of rocks and belts of level woodland. It is most easily reached from Kalyán across a rough roadless tract of about 8 miles, ending in a climb of a perpendicular height of about 700 feet. Connected with the base of the hill is a forest-covered table-land, upon which is the tomb of the Báwa Malang, and a few huts for the use of the garrison. From this table-land the ascent to the lower fort is very steep, and upwards of 300 feet high. The latter part is by an almost perpendicular rock-hewn staircase, at the top of which is a strong gateway covered by two outstanding towers, which even with the smallest garrison make the place impregnable. From the lower to the upper fort there is a perpendicular ascent of 200 feet by means of a narrow flight of rock-hewn steps, on the face of a precipice so steep as to make the ascent at all times most difficult and dangerous. The upper fort, a space of 200 yards long by about 70 broad, is nothing more than the top, as it were, of the third hill. It has no fortifications, but there are traces of an enclosure and of the walls of an old building. The water-

supply is from a range of five cisterns, and a copper pipe is used to carry water to the lower fort.

Malapuram (*Maliyápuram*, *Malleapooram*).—Town (more correctly a group of hamlets) in Ernád *táluk*, Malabar District, Madras Presidency. Lat. 11° 3′ 2″ N., long. 75° 51′ 21″ E. Population (1881) 6501; number of houses, 1335. Hindus numbered 2324; Muhammadans, 3863; and Christians, 314. Notable as the centre, for many years, of the Máppillá fanatical outbreaks (*see* MALABAR DISTRICT). In consequence of two such risings in 1841 and 1843, native troops were sent here; but as they proved useless during the outbreaks of 1849 and 1851, a special Assistant Collector and a detachment of European troops have since been stationed in the place. In 1873 they were employed against a gang of religious fanatics and murderers. Another outbreak occurred recently (1885). On more than one occasion special corps have been raised in Malapuram to deal with local outrages, but this work is now done by the regular constabulary. Malapuram is 30 miles south-east of Calicut, with which place it is connected by a good road. It is fairly healthy. The chief buildings are the special Assistant Collector's court, and the barracks.

Malassers.—Tribe inhabiting the Anamalai Hills, Coimbatore District, Madras Presidency. They were a low-caste people of the plains, who took refuge in the hills in olden times. They are principally found in the lower ranges and along the foot of the Anamalais, and live by thieving, hiring themselves out as herdsmen, etc. They occasionally take to cultivation, and adopt settled habits. Number not returned separately in the Census Report of 1881.

for every rupee paid. These strings are preserved with as much care as if they were title-deeds. Recently, certain Malayális lodged a complaint against the village revenue officer for having levied more than he ought, on finding that there were more knots in the current year's string than in that of the previous year. Some of them have to pay tribute to the hill *pálegárs*, and they never question the correctness of the *killák* sent to them, which *killák* consists merely of a leaf with as many marks made on it by the thumb nail of the *pálegár* as there are rupees to be paid. They believe firmly that their god would punish the messenger if he tampered with the leaf. Nor would they dare, for the same reason, to tie an extra knot in their strings.

The Malayálí houses are long, low, thatched structures, with the roofs

Maláyagirí.—One of the principal peaks in Orissa, Bengal, in the State of Pál Lahára, in lat. 21° 22′ 20″ N., long. 85° 18′ 41″ E. A magnificent mountain, 3895 feet high, towering above the lesser ranges, with building space and water on its summit.

Malayális.—Tribe inhabiting the hill ranges of North and South

Arcot and Salem Districts, Madras Presidency. A timid and harmless people, engaged chiefly in pastoral and agricultural pursuits; never appearing in the courts, and rarely quarrelling. The Census of 1881 returned them as numbering 69,396.

The Malayálís, according to their traditions, originally emigrated from Conjevaram about 600 years ago, on account of religious persecution. The account given by the Malayálís of North Arcot is that, in 1132 A.D., some of the Vedárs of Kangundi asked that wives should be given to them by the Kondekatti Vellalárs of Conjevaram. They were refused, and in anger kidnapped seven young Vellalár maidens. To recover them seven Vellalárs set out, with seven dogs, leaving instructions with their wives that, if the dogs returned alone, then they should be considered as having perished, and their funeral ceremonies should be performed. Arrived at the Pálár, they found that river in flood, and with difficulty crossed it; but their dogs, after swimming half-way, turned back and returned to Conjevaram. The seven men continued their journey, killed the Vedárs who had taken away the maidens, and returned home to find that they had been given up as lost. Their wives had become widows, their funeral ceremonies had been performed, and they were in consequence outcastes. Under these circumstances, they contracted marriages with some Vedár women, and retired to the Jawadi hills. This account has been preserved by the Malayálís in a small palm-leaf book, which none of them can read, as all are ignorant of letters.

The Malayálís inhabiting the different hill ranges tenaciously cling to their common origin, and shrink from alliances with the people of the plains. In features and physical appearance and dress they scarcely

Malangarh rises in a succession of bare stony slopes, broken by walls of rocks and belts of level woodland. It is most easily reached from Kalyán across a rough roadless tract of about 8 miles, ending in a climb of a perpendicular height of about 700 feet. Connected with the base of the hill is a forest-covered table-land, upon which is the tomb of the Báwa Malang, and a few huts for the use of the garrison. From this table-land the ascent to the lower fort is very steep, and upwards of 300 feet high. The latter part is by an almost perpendicular rock-hewn staircase, at the top of which is a strong gateway covered by two outstanding towers, which even with the smallest ... the place impregnable. From the lower to the upper

other castes.

Marriage ceremonies are performed without the intervention of Bráhmans, and without the recital of *mantras* or sacred formulæ. The marriage tie appears to be a loose one; and infidelity within caste limits, on the part of either sex, is not punished by excommunication. The

traces of ancient polyandric institutions still survive. A wife may desert her lawful husband and live with any other man of the same caste, but all her children are considered to be those of her husband alone. The sons of Malayálís, when mere children, are married to mature women, and the father-in-law of the bride assumes the performance of the procreative function, thus assuring for himself and his son a descendant. When the putative father comes of age, and his wife's male children are married, he performs for them the same office which his father did for him.

In certain localities it is imperative on a widow to marry again. Even at 80 years of age a widow is not exempted from this rule, which nothing but the most persistent obstinacy on her part can evade. If a widow be not remarried at once, the *guru* or priest sends for her to his house, and, to avoid this fate, the widow usually consents to remarriage. In the Uttankarai *táluk* of Salem District a curious custom prevails with regard to the marriage ceremonies. On the wedding day, the Malayálí bride is the common property of all the men of her village, except the person chiefly interested, but after that date she belongs to her husband exclusively.

In some localities when a stranger approaches a village, the first man who sees him salutes, and then relieves him of the bamboo staff which all carry. He then conducts the stranger to his house, and places the staff in a corner, as a sign that the visitor shall receive hospitality in that house alone. Should, however, the visit be particularly intended for another villager, the staff is handed over to the desired host, who sets it up in a corner of his hut, for where the staff is the owner must feed.

In South Arcot, the Malayálís keep a tally of the payments made by them on account of Government revenue, by tying a knot in a string for every rupee paid. These strings are preserved with as much care as if they were title-deeds. Recently, certain Malayálís lodged a complaint against the village revenue officer for having levied more than he ought, on finding that there were more knots in the current year's string than in that of the previous year. Some of them have to pay tribute to the hill *pálegárs*, and they never question the correctness of the *killák* sent to them, which *killák* consists merely of a leaf with as many marks made on it by the thumb nail of the *pálegár* as there are rupees to be paid. They believe firmly that their god would punish the messenger if he tampered with the leaf. Nor would they dare, for the same reason, to tie an extra knot in their strings.

The Malayálí houses are long, low, thatched structures, with the roofs secured against the high winds of the hills by long bamboos pegged down at intervals. Each hut stands in a yard surrounded by a palisade of wattled bamboos. The village precincts are regarded as sacred; and even Bráhmans are desired to walk barefoot along their alleys. In certain districts their villages resemble clusters of enlarged beehives, the

a very early period. As far back as 1686 there was a silk factory here. In 1770, English Bázár was fixed upon for a commercial residency; the buildings of which, strongly fortified after the fashion of those days, exist to the present day, supplying both public offices and the private residence of the Collector. As an administrative unit, the District of Maldah only began to exist in 1813. In that year, in order to secure a closer magisterial supervision, various police circles were detached from the Districts of Rájsháhí, Dinájpur, and Purniah, and placed in charge of a Joint Magistrate and Deputy Collector, who was stationed at English Bázár. A separate treasury was first opened in 1832; and it was not till 1859 that a full Magistrate-Collector was appointed to the District. This gradual growth to independence has left traces in the confusion which recently existed in the boundaries of the fiscal, civil, and criminal jurisdictions. As these jurisdictions were acquired at different times, and under different circumstances, a perplexing absence of uniformity prevailed both in geographical area, and in the exercise of administrative functions. But changes that have taken place since 1870 have done much to simplify the boundaries, and unite all duties at a single centre.

Population.—No trustworthy information exists with regard to the population of the District in early times. The Census of 1872 returned the total number at 676,426 persons, residing in 2100 *mauzás* or villages and in 129,579 houses. In 1881, the Census returned the population of the District at 710,448, showing an increase of 34,002, or 5·02 per cent., over that of 1872.

The results of the Census of 1881 may be briefly summarized as follows:—Area, 1891 square miles, with 3250 towns and villages, and 126,202 houses. Population 710,448, namely, males 346,998, and females 363,450; proportion of males, 48·8 per cent. Average density of population, 375·7 persons per square mile; villages per square mile, 1·72; persons per village, 219; persons per house, 5·6. Classified according to sex and age, there were in 1881—under 15 years of age, males 146,182, and females 149,261; total children, 285,443, or 40·1 per cent. of the population: 15 years and upwards, males 201,816, and females 223,189; total adults, 425,005, or 59·9 per cent.

Maldah presents the ethnical characteristics of a border District, in which are met the semi-aborigines of the Bengal delta and the Behar valley, and the wild tribes from the foot of the Himálayas and the Chutiá Nágpur Hills. It was one of the surprises revealed by the Census that the Musalmáns form a minority of the inhabitants, even in the neighbourhood of their ancient capitals of Gaur and Panduah. Classified according to religion, the population in 1881 consisted of—Hindus, 379,153, or 53·4 per cent.; Muhammadans, 329,525, or 46·4

per cent.; Christians, 26; Brahmos, 3; Jews, 7; and Santáls professing their aboriginal religion, 1734.

Besides the aborigines still professing their primitive faiths, the Census returns a total of 70,044 aborigines among the Hindu population. The three cognate tribes of Koch, Palí, and Rájbansí, number collectively 60,700 souls, or six-sevenths of the whole. This race, which has attained some degree of civilisation in its original home in Kuch Behar, is content in Maldah to lead a wild life amid the jungles which cover the eastern half of the District. The other Hinduized aboriginal tribes include the Binds, 7578; Kharwárs, 4182; Kols, 897; Santáls, 833; and Bhuiyas, 259. The Chains, a local Behar tribe; and the Dhángars, although not returned in the Census, are also aboriginal tribes. The latter are immigrants from the further bank of the Ganges, who have been attracted by the indigo industry.

Among Hindus proper, the Bráhmans number 12,001; the Rájputs, 5104; the Káyasths, 4656; and the Baniyás, 6963. The most numerous caste is the Kaibartta, with 23,756 members; next come the Gwála, 16,875; Tior, 15,736; Harí, 11,788; Telí, 9005; Nápit, 8046; Chamár, 7718; Tántí, 6493; Lohár, 6202; Sunrí, 5943; and Dhánuk, 5057. The number of Hindus rejecting caste was returned at 9860, of whom 9569 were Vaishnavs.

The Muhammadan community, divided according to sect, consists of Sunnís, 302,816; Shiás, 16,521; and unspecified, 10,188. A large proportion of the Musalmáns are known to belong to the reformed Faráizí sect; and in 1869, there were several State prosecutions in Maldah for Wahábí disaffection. No Wahábís or Faráizís, however, were returned as such in the Census of 1881.

Urban and Rural Population.—The population is almost entirely rural. Only 4 places were returned as towns in 1881, with a total urban population of 17,124 persons, of which only one, English Bázár or Angrazábád (12,430), had a population exceeding five thousand. The people show no tendency whatever to gather even into large villages. Out of a total of 3250 towns and villages, as many as 2960 contained less than five hundred inhabitants in 1881, while 220 had from five hundred to a thousand, and 70 upwards of one thousand inhabitants. The most important centres of commerce are HAIATPUR on the Ganges, where there is a junction with the stream of the Kálindrí; and ROHANPUR on the Purnábhabá, just above the confluence of that river with the Mahánandá. The ruins of GAUR and PANDUAH are described under separate headings.

The Material Condition of the People varies very much in the different portions of the District. To the westward of the Mahánandá, and along both banks of that river, the cultivators are very prosperous. The cultivation of the mulberry is extremely profitable; and the

mango orchards also, which abound in this part, help considerably towards paying the rent. On the eastern side of the Mahánandá, and especially towards the north, the population is chiefly composed of semi-Hinduized aboriginals, Palís and Kochs. Their houses are built of grass matting, and are rarely close enough together to constitute a village. There is little doubt that such wants as they have are abundantly satisfied in the jungle, and they are a contented-looking race. To the south-east of the District, on the borders of Rájsháhí, the villages become larger, and the cultivation is better, but the level of comfort is not equal to that in the tract first described.

As regards occupation, the male population were divided by the Census of 1881 into the following six classes:—(1) Professional, including officials and professional persons, 5728; (2) domestic servants, inn and lodging-house keepers, etc., 3792; (3) commercial, including bankers, traders, carriers, etc., 13,320; (4) agricultural and pastoral class, including gardeners, 139,568; (5) manufacturing and artisan class, 30,803; and (6) indefinite and non-productive, comprising general labourers and male children, 153,787.

Agriculture.—Rice constitutes the staple crop throughout the District. Of the total food-supply, it is estimated that the *áman* or winter crop, grown on low lands, forms about 29 per cent.; the *áus*, *bhadaí*, or autumn crop, grown on high lands, 16 per cent.; and the *boro* or spring crop, grown in marshes, 8 per cent. The remainder is made up by cold-weather food crops, 39 per cent.; and other food crops, 7 per cent. These cold-weather crops consist of pulses and oil-seeds of various sorts, wheat, maize, and inferior cereals. They are sown when the *áus* rice crop has been taken off the land. Among miscellaneous crops are—indigo, covering about 30,000 acres, chiefly on the sandy deposits near the Ganges; mulberry, grown in little raised plots along the banks of the Mahánandá; and the mango tree, which here yields the most valued fruit in all Bengal. Manure is only used on mulberry lands; and irrigation is not necessary, except for the *boro* rice crop, which can be easily watered from the neighbouring river or marsh. The principle of the rotation of crops is not known, but fields are occasionally allowed to lie fallow. Spare land is still to be found in most parts of the District; but the limit of cultivation is steadily advancing, especially over the ruins of Gaur.

The average produce of an acre of good rice land, renting at 7s. 6d., is about 24 cwts. If a second crop could be raised from the same field, it would amount to an additional 13 cwts. The total value is returned by the Collector at more than £6, but his estimate appears to be too high. The lowest rate of rent is 9d. an acre, paid for *áman* rice lands; 7s. 6d. per acre is paid for land yielding three crops a year; while mulberry and mango gardens pay from 6s. to 18s. Alto-

gether, the average rate of rent may be put at over 4s. an acre. It is stated that there has been no excessive enhancement in recent years. There is little that is peculiar in the land tenures of the District, except the existence of several large *lákhiráj* estates, granted as endowments to Muhammadan *fakírs*. Among cultivating tenures, the *hál hásilá* deserves notice, according to which the annual rent varies, both according to the amount of land put under cultivation and to the nature of the crop raised. This tenure is most common in the backward parts of the District, and one of its incidents is that it allows a certain proportion of the village lands always to lie fallow. The number of tenants who have established rights of occupancy is thought not to exceed 15 per cent.; the remainder are mere tenants-at-will.

Both the ordinary rate of wages and the price of food-grains have approximately doubled within the past twenty years. A coolie now receives about 5d. a day; an agricultural labourer, 3d., with an additional payment in kind; a smith or carpenter, from 8d. to 1s. In 1873, the price of common rice was 4s. 9d. per cwt.; of barley, 3s. 1d.; of wheat, 6s. The highest price reached by rice in 1866, the year of the Orissa famine, was 11s. per cwt.

Maldah is liable, to some extent, to both the calamities of flood and drought. The Ganges occasionally overflows the eastern portion, especially in the neighbourhood of Háiatpur; and the other rivers annually come down swollen with the melted snows of the Himálayas. These inundations often cause considerable suffering, but they do not seriously injure the general harvest of the District. The drought of 1873, on the other hand, would have resulted in a widespread famine, had it not been for the prompt intervention of Government. Means of communication by the rivers are sufficiently ample to prevent scarcity from intensifying into acute distress.

Manufactures.—The two staple manufactures of the District are silk and indigo. The weaving of silk is said to date back to the Hindu kingdom of Gaur, and the peculiar cloth known as *maldahi* has been for generations a speciality of external commerce. The English had a factory at Maldah at least as early as 1686; and the production is locally reported to have been stimulated by French enterprise. Dr. Buchanan-Hamilton, in the beginning of the present century, described with great detail the processes used in silk-weaving, and in the ancillary business of dyeing. Even at that time, however, the trade was languishing, and it has since continued to decline. The total export is now estimated at not more than £600 a year. Silk-winding, on the other hand, is in a flourishing condition. The total out-turn of raw silk from seven European concerns, and from a large number of native filatures, is estimated to amount to more than 15,000 cwts.

The value of this, added to the value of exported cocoons, would reach about £180,000 a year; and a large proportion of this sum finds its way to the rearers of mulberry and silk-worms, who are described as being in most prosperous circumstances. The cultivation of indigo is not so flourishing as it was twenty years ago. At the present time there are upwards of 20 factories at work, belonging to 7 different concerns, with an average out-turn of about 2000 cwts., valued at £60,000. Brass-ware of an excellent quality is manufactured at Nawábganj, and paper in certain villages.

River traffic is brisk in all parts of the District. Háiatpur, on the Ganges, is a great trading centre in connection with the railway on the opposite bank of the river. At Rohanpur, on the Purnábhabá, is collected the surplus rice of Dinájpur; and all down the banks of the Mahánandá there are busy markets. The principal exports are rice (largely consigned towards the North-West), silk, indigo, brass-ware, and mango fruit. The imports comprise cotton cloth, salt, sugar, spices, betel-nuts, and cocoa-nuts. The registration returns for 1876-77 show a total export from the District valued at £321,619, against imports valued at £275,680. The chief exports are—rice, 500,500 *maunds*, and paddy, 96,900 *maunds*, valued together at £110,790; wheat, 108,800 *maunds*, valued at £21,760; gram and pulse, 155,200 *maunds*, valued at £27,160; jute, 74,049 *maunds*, valued at £22,214; gunny bags, 601,160 in number, valued at £13,225; indigo, 1051 *maunds*, valued at £21,020; raw silk, 364 *maunds*, valued at £18,200. The imports comprise European piece-goods, £9780 (this must be exclusive of the consignments from the railway at Rájmahál, at which station £184,580 was received from Calcutta during the year under notice); salt, 174,800 *maunds*, valued at £87,400; sugar, refined, 30,500 *maunds*, and unrefined, 171,200 *maunds*, valued together at £105,480. Among the local marts, Maldah town stands first with exports, valued at £97,331, and imports, valued at £199,629; Háiatpur exported £37,395, and imported £21,341; Rohanpur exported £39,685, and imported £7716. Owing to an alteration in the system of registration no trade statistics of a later date than those given above are available. About three-fourths of the rice, and a large portion of the gunny bags, are consigned up the Ganges to the North-Western Provinces, in return for which the large imports of sugar are received from Gházípur. The wheat is sent to Calcutta, either direct by country boat, or by the railway through the Santál Parganás.

No line of railway crosses the boundary of the District; but both the East Indian loop-line at Rájmahál and Sáhibganj, and the new Northern Bengal State Railway in the neighbouring District of Rájsháhí, are near enough to exercise a direct influence upon the course

of commerce. In 1870, the total length of roads in Maldah was returned at 177 miles, and the cost of maintenance at £368. But the real means of communication are the rivers, especially after the autumnal rains, when every little *nálá* becomes navigable.

Administration.—In 1870–71, the net revenue of Maldah District amounted to £59,493, towards which the land-tax contributed £32,323, or 54 per cent.; the net expenditure was £15,291, or little more than one-fourth of the revenue. In 1883–84, the net revenue of the District, from the following six main sources, amounted to £69,435, as follows:—Land revenue, £42,757; excise, £13,499; stamps, £8700; registration, £575; road cess, £2947; and municipal taxes, £957. In the same year, there were 2 covenanted civil servants stationed in the District, and 6 magisterial, 3 civil, and 5 revenue courts were open. For police purposes, the District is divided into 9 police circles or *thánás*. In 1883, the regular and municipal police numbered 262 men of all ranks, maintained at a total cost of £4560. In addition, there was a rural police or village watch of 1601 men. The total machinery, therefore, for the protection of person and property consisted of 1863 officers and men, giving 1 man to every 1·01 square mile of the area or to every 381 persons in the population. The estimated total cost was £12,192, averaging £6, 8s. 10d. per square mile and 4d. per head of population. In that year, the total number of persons convicted of any offence, great or small, amounted to 907, or one in every 772 of the population. By far the greater number of the convictions were for petty offences. The District contains 1 jail, at English Bázár. In 1883, the average daily number of prisoners was 71·42, of whom 3·58 were females; the labouring convicts averaged 55. These figures show 1 person in jail to every 9950 of the population. The total cost amounted to £695, or £9, 14s. 6d. per prisoner.

Education has widely spread of recent years, owing to the changes by which the benefit of the grant-in-aid rules has been extended, first to the vernacular middle class schools, and ultimately to the village schools or *páthsálás*. In 1856 there were only 2 schools in the District, attended by 117 pupils. By 1870 these numbers had risen to 18 schools and 986 pupils; and in 1872, when Sir G. Campbell's reforms came into operation, the schools had increased to 179, and the pupils to 4207. By 1883–84 there were 441 primary schools under inspection, attended by 8608 boys. The English higher-class school at English Bázár was attended in 1883–84 by 147 pupils. The Census Report of 1881 returned 8447 boys and 99 girls as under instruction in Maldah District, besides 15,247 males and 146 females able to read and write, but not under instruction.

The sub-divisional system of administration has not yet been extended to Maldah. The District contains 8 police circles, and 49

parganás or fiscal divisions, with an aggregate of 595 revenue-paying estates in 1883–84, owned by 1624 separate shareholders. In 1883 there was 1 civil judge and 6 stipendiary magistrates; the maximum distance of any village from the nearest court was 50 miles, the average distance 26 miles. According to the Census Report of 1881, there are two municipalities in the District,—English Bázár and Maldah town,—with a total population of 17,054 souls; the municipal income in 1883–84 was returned at £1419, the average rate of taxation being 1s. 1⅜d. per head.

Medical Aspect.—The climate of Maldah is considered somewhat less unhealthy than that of the neighbouring Districts. The rainy season lasts from the middle of June to the middle of October. The average rainfall is returned at 55·26 inches; the mean annual temperature at 56·66° F. The chief epidemic diseases are malarious fever, cholera, and small-pox. Outbreaks of fever annually coincide with the cessation of the rains. Cholera is always heard of first in the outlying parts of the District; and it has been repeatedly observed to spread from religious fairs in all directions. Small-pox is propagated by the popular practice of inoculation. There was, in 1881, only one charitable dispensary in the District, at English Bázár, at which both in-door and out-door patients were treated. [For further information regarding Maldah District, see *The Statistical Account of Bengal*, by W. W. Hunter, vol. vii. pp. 1–152 (London, Trübner & Co., 1876); *Geographical and Statistical Report on the District of Maldah*, by Mr. J. J. Pemberton, Revenue Surveyor, dated October 1852. Also the *Bengal Census Report* of 1881; and the several Provincial and Departmental Reports from 1880 to 1884.]

Maldah or **Old Maldah.** — Town in Maldah District, Bengal; situated at the confluence of the Kálindrí with the Mahánandá, in lat. 25° 2′ 30″ N., and long. 88° 10′ 51″ E. Population (1872) 5262; (1881) 4694. Municipal revenue (1883), £295; rate of taxation, 1s. 0½d. per head of population. This town is admirably situated for river traffic, and probably rose to prosperity as the port of the Muhammadan Panduah. During the last century it was the seat of thriving cotton and silk manufactures, and both the French and Dutch had factories here. But in 1810, Maldah, according to Dr. Buchanan-Hamilton's statement, was already beginning to lose its prosperity; and it now shows signs of poverty and decay. Trade is still carried on in food stuffs.

Maldive Islands.—A number of islands, grouped together in clusters called Atolls, lying between 42′ S. to 7° 6′ N. lat., and between 72° 33′ and 73° 44′ E. long. The larger islands are generally inhabited; but many of the smaller are mere sandbanks or barren rocks. There are 19 Atolls in all, with several detached islands or rocks in the channels

that separate them. Mali, or King's Island, the capital of the Maldive group, situated in lat. 4° 10′ N., and long. 73° 30′ E., is about 1 mile in length, and ¾ mile in breadth. It contains a population of upwards of 1500 persons, and is the residence of the Sultán and the seat of Government. The political connection of the Maldives is with Ceylon, and not with British India. The Sultán sends an annual embassy to the Governor of Ceylon, claiming the protection and favour of the British Government, and presenting a tribute of cowries, fish, and cakes. The Governor in return stipulates for succour to Europeans shipwrecked on the islands.

Our early knowledge of the Maldives is mainly derived from the *Travels* of Ibn Batuta, who visited the group *circ.* 1340 A.D., and married a daughter of one of the Wazírs; and from the *Adventures* of Pyrard, a Frenchman, who suffered shipwreck on the Malosmadu Atoll in 1602, and was detained as a captive for five years. In recent times, Lieutenant Christopher, R.N., when officially engaged on the Indian Survey, remained on the islands from June 1834 to September 1835. The results of his observations, as published in the *Journal of the Royal Asiatic Society*, vol. vi. O.S., form the basis of all subsequent accounts. An interesting comparison of his vocabulary with that given by Pyrard will be found in the *Journal* R.A.S., vol. x., N.S., part ii.

The native name is Mahaldíb, from *mali*, the chief Atoll, and *dwípa*, the Sanskrit for island. The number of Atolls or groups is, for political purposes, reckoned at 13. The total of separate islands is popularly reported to be 12,000, a vague figure, which in Maldive arithmetic corresponds to the 10,000 (*lákh*) of Hindus. The Sultán's title is *Dolos Assa Ral Tera Atholon*, or 'King of 13 Provinces and 12,000 Islands.' The following is the list of the 13 Atolls, in order from the north, with the number of inhabited islands in each group, as derived from the Admiralty charts (1868):—(1) Tilladumati, with 17 inhabited islands; (2) Milladumadu, 32; (3) Paddipholo, 2; (4) Malosmadu, 30; (5) Ari, 13; (6) Mali or Malé, 8; (7) Phalidu, 5; (8) Moluk, 8; (9) Nillandu, 13; (10) Collomandu, 11; (11) Adumati, 12; (12) Suadiva, 17; (13) Addu, 7; total of inhabited islands, 175. The total number of inhabitants is entirely unknown; estimates vary between 20,000 and 200,000. The latter is probably nearest the actual truth.

From time immemorial, the Maldives have been in some sense dependent upon Ceylon. The early Greek, Chinese, and Arab travellers agree in describing Ceylon as ruling over an indefinite number of adjacent islands. The language of the inhabitants at the present day, and still more in the time of Pyrard, has many points of resemblance to the modern Singhalese; and a few traces have been preserved of a common Buddhism. An inscription seen by Ibn Batuta would place the conversion to Muhammadanism in about the year 1200. The

Portuguese discovered the Maldives in 1506, and acquired the same sort of vague supremacy that is now exercised by the British.

Most of the materials for the following paragraphs are condensed from Captain Horsburgh and Commander Dundas Taylor's *Sailing Directions*.

People.—Pyrard places the colonization of the Maldives at about 1200 A.D., but the date must be put back several centuries. Pappus of Alexandria (end of the 4th century A.D.) reckoned 1370 islands as dependencies of Ceylon. Fa-Hian (in the 5th century A.D.) says: 'On every side (of Ceylon) are small islands, perhaps amounting to one hundred in number. They are distant from one another ten or twenty *li*, and as much as two hundred *li*. All of them depend on the great island. Most of them produce precious stones and pearls.' Ptolemy and Cosmos also gave their readers to understand that the islands were inhabited, and Cosmos wrote in the 6th century. Suleimán, writing in the 9th century, calls them Dybadjat, and mentions that they had a queen to govern them, and that 'a brisk trade was carried on in cowries, amber, and coir.' Al Biruni (11th century) calls the people Dyvah, and distinguishes the group into the Cowrie and Coir Islands, from their chief products.

Mr. A. Gray, of the Ceylon Civil Service, in an interesting monograph upon the Maldives, points out that they disclose abundant evidence of demon-worship, *bali*-worship, and of Singhalese superstitions generally; but the traces of Buddhism are curiously faint. At present the islanders profess Muhammadanism, which is said to have been introduced by a man from Persia about 400 years ago, whose tomb at Mali is held in great veneration. Mr. Gray observes with regard to the religion of the parent stock and the islanders whom it sent out as colonists, that while the Singhalese have held to the cosmopolitan principles and the simple worship of the Buddhist faith, the Maldive islanders have adopted the exclusive and monotheistic faith of Muhammad. Strangely enough, the Maldive word for 'image' is *búdú;* and Ibn Batuta calls an idol temple by the term *boudh-khána.* The tradition current is that a Maghrébin, Aboul Berecât of Berber, brought the Maldive Sultán, his court and people, over to Islám by exorcising, through the efficacy of the Kurán, a sea demon, who played havoc among the island maidens.

The whole Maldive group is inhabited by a civilised race of people, who carry on a considerable trade with the British possessions in India, more particularly with Bengal, Chittagong, Ceylon, and the Malabar coast. They are expert navigators and sailors; schools for teaching navigation are found on some of the islands. The people are inoffensive and timid, and there appears to be far less crime among them than with more polished nations. Murder has been seldom known; and theft

and drunkenness are very uncommon. The men in appearance are of a dark copper colour, rather short, and in person not unlike the natives of Ceylon and the Malabar coast; but at Mali, many exhibit in their physical conformation an admixture of African blood, doubtless derived from the Zanzibar slaves occasionally brought by Maskat vessels. The women are not pretty, and are extremely alarmed at the sight of strangers. These islanders have several times been more than kind in their hospitality to shipwrecked mariners.

In Pyrard's time (17th century) a wreck became the property of the Sultán; a similar law applied to a ship whose captain died at the islands, and it is even said that such an occurrence was nefariously hurried on. At the present time the feeling lingers that after the wreck of a ship the captain has lost all right to its goods and cargo. When the ship *Liffey* was wrecked in 1877, the people could not be induced to lend any assistance to recover the cargo 'without the express leave of the Sultán.'

Productions.—The cocoa-nut palm is most extensively planted; rows of them line the roads. The palm grows to a height of 70 to 90 feet, and the nut is esteemed superior to the produce of India. Many kinds of fruit-yielding trees are found. Millet and cotton are grown to a small extent. Cowrie shells (the small money of the islands) are found in myriads. Game birds are plentiful; wild ducks, which come over in great numbers during November, are caught in nets, and considered excellent food. The *bonito* fishery is the chief employment of the islanders, that fish being the principal article of food as well as of commerce; sometimes 1000 are caught by one boat in a day, but 600 or 700 is the ordinary take.

Trade.—The whole of the foreign export and import trade of this group of islands is conducted at Mali, whither the produce of all the Atolls is brought, the dealers from each carrying back the produce of other parts to supply the wants of their islands. The external trade of Mali consists of two branches, one carried on by traders from Chittagong, Point-de-Galle, the Malabar coast, and occasionally from Maskat in the Persian Gulf; the other by the islanders themselves in their own vessels.

The foreign traders call regularly once a year, arriving about March and leaving about July. They barter principally for *bonito* fish, of which two or three millions are shipped off every season. Tortoise-shell, cocoa-nuts, coir-yarn, cowries, and a kind of sweetmeat form the other articles of export. That part of the external trade which is conducted by the natives themselves, is carried on chiefly with Calcutta, in boats of from 100 to 200 tons burden. They leave the islands annually in August or September, and return in December. The imports are rice, dates, salt, leaf-tobacco, areca-nuts, coarse white

cloth, cotton, red and white check cotton handkerchiefs, curry stuff, *ghí*, china-ware, Indian pottery, and coarse brown sugar; and, in small quantities, steel, brass wire, thread, and waist-cloths of various colours. Mr. A. Gray, Ceylon Civil Service, writing in 1878, says the trade of the Maldives is in a state of decline; that the cultivation of fruit and vegetables is neglected; and that the supply of grain, most of which is imported, is precarious and insufficient.

Government.—The Maldive islands are governed by a Sultán, whose title and rank are hereditary. Under him are 6 Wazírs or ministers of State, of whom the first in rank is styled Durimind, the chief or general of the army; but above these, and second only to the Sultán, is the Fandiári, the head priest and judge. The Hindigeri or custom-master and public treasurer, and the Amír-el-bahr or harbour-master, are also great men. All these functionaries reside at Mali or King's Island. Every Atoll pays a certain fixed revenue—a portion of its produce—to the Government at Mali, and nobody is allowed to trade with foreigners except at the capital, where the dues are exacted. The Indian rupee is the current coin of the islands, and is used in all money transactions. Of cowries, 12,000, constituting one *kota* or *gúlah*, can be purchased at the *bázár* of Mali for 1 rupee.

Language.—Three different kinds of written characters are found on Maldive walls and tombstones. The most ancient are called Dewehi Hakura, which were probably used by the first inhabitants, and are still retained in the South Atolls. The next is the Arabic character, written from right to left. The third, also written from right to left, and called Gabali-Tana, is the common dialect throughout all the Atolls. In consequence of intercourse with traders from Bengal and other parts, the language is intermixed with many foreign words. Letters of the alphabet are used as numerals, reckoning by twelves instead of by tens.

Climate.—The climate of the Maldives, which is very unhealthy, forms the great obstacle to foreign intercourse and internal improvement. The cause of strangers losing their health is partly the lagoons and marshes throughout the islands, and partly the unvarying temperature of the atmosphere. The principal diseases are a species of bowel complaint and *beri-beri.* Ague and intermittent fever also prevail, and are difficult to be got rid of. The thermometer ranges from 75° to 85° F. in the shade.

Channels.—Amongst the different Atolls, there are good channels for ships, some of which are intricate, and only fit for steamers, as the currents run strong through them to east or west, according to the season. There are also numerous openings and gateways, which are very deep, and used by the Maldive boats in passing from one Atoll to another. Some of these will admit the very largest ships.

Málegáon.—Sub-division of Násik District, Bombay Presidency. Area, 775 square miles, containing 1 town and 143 villages. Population (1872) 68,419; (1881) 78,498, namely, 40,136 males and 38,362 females. Hindus number 60,921; Muhammadans, 8081; and 'others,' 9496. Bounded on the north and east by Sub-divisions of Khándesh District; on the south-east and east by Nándgáon and Chándor; and on the west by Kalvan and Báglán. Chief town, MALEGAON.

of which 203 are cultivated. Population (1869) 150,054; (1881) 153,045, namely, males 80,085, and females 72,960. Classified according to religion, there were in 1881—Hindus, 131,844; Muhammadans, 21,200; Jain, 1. Of the 378 villages in the *tahsíl*, 285 contained less than five hundred inhabitants. This *tahsíl* comprises the 2 *parganás* of Malihábád and Mahona. In 1883 it contained 1 criminal court, 2 police circles (*thánás*), with a regular police force of 48 officers and men, besides a rural police of 464 *chaukídárs*.

Malihábád.—*Parganá* in Lucknow District, Oudh; bounded on the north by Hardoi District, on the east by Mahona *parganá*, on the south by Kákori *parganá*, and on the west by Mohan Aurás *parganá* in Unao. In general fertility, this is stated to be one of the best *parganás* in the District; and while the percentage of cultivated area is higher than in any other, the density of population is lower. The uncultivated land only amounts to 37·47 per cent. of the total area; and of this one-half is taken up by homesteads, roads, and tanks, the remainder chiefly consisting of barren tracts along the course of the small streams, Barti, Jhandi, and Akrahdi, tributaries of the Gúmti, which flows through the *parganá* in a south-easterly direction. Area, 187 square miles, of which 116 square miles are cultivated. Government land revenue, £13,861; being at an average rate of 3s. 10¼d. per acre of cultivated area, 2s. 9¼d. per acre of assessed area, and 2s. 4¾d. per acre of total area. Population (1881) 87,797, namely, 45,905 males and 41,892 females. The Oudh and Rohilkhand Railway intersects the *parganá*, and there are also several fairly good lines of road.

Malihábád.—Town in Lucknow District, Oudh; situated on the Lucknow and Sandíla road, in lat. 26° 54′ 50″ N., and long. 80° 45′ E. An important town and a station on the Oudh and Rohilkhand Railway. Population (1869) 8026; (1881) 7276, namely, Hindus 3761, and Muhammadans 3515. The principal residents are Musalmáns, the two *tálukdárs* being Afrídi Patháns. Under native rule, the armed retainers, maintained by every landholder throughout Oudh, were com monly recruited from the Pathán families of Malihábád. Police station, *tahsíl*, post-office, registration office, 2 boys' and 2 girls' schools. For police and conservancy purposes a small house-tax is levied.

Malimbi-betta.—Mountain in the Yelusávirashimé *táluk* in the north of Coorg, Southern India; 4488 feet above the sea. The summit has a graceful conical shape, conspicuous from every part of Coorg. Distant 34 miles from Merkára.

Málínagar.—Town in Darbhangah District, Bengal; situated in lat. 25° 59′ 30″ N., and long. 85° 42′ 30″ E., on the north bank of the Little Gandak, on the main road from Púsa to Darbhangah. Population (1881) 4225. Contains a temple to Mahádeo, completed in 1844. A *melá* or fair, called *Rámnávamí*, is held annually from 1st to 5th of April in honour of Ráma, and is attended by from 2000 to 4000 persons. This fair is, as usual, partly of a religious and partly of a commercial character.

Malipur (*Maliyapuram*).—Town (more correctly a group of hamlets) in Malabar District, Madras Presidency.—*See* MALAPURAM.

Ma-lí-won.—Sub-division of Mergui District, Tenasserim Division, British Burma; situated in the extreme south of the Province. It includes many of the islands in Mergui Archipelago, and also Victoria Island off the mouth of the Pakchan river. The western boundary of Ma-lí-won is the Bay of Bengal; the coast-line is for the most part fringed with mangrove swamps. The country consists chiefly of undulating grassy plains, and of stretches of dense evergreen virgin forest; towards the north and south-east rise ranges of low tree-clad hills, spurs of the main dividing chain. The area brought under cultivation is very small; the chief product of the Sub-division is tin, obtained by washing the gravel lying immediately below the alluvial deposits in the valley. Population (1877) 5561; (1881) 2559—Siamese, Chinese, Malays, and a few Burmese. The Siamese confine themselves to cultivation, and the Chinese to mining. The gross revenue in 1881 was £280. Tin mines were for some time worked here by a European company, but were not found sufficiently productive.

Máliyás.—Hill Tracts in GANJAM and VIZAGAPATAM Districts, Madras Presidency; for particulars of which see the articles on those Districts, and the article KANDHS.

Malkangiri (or *Malkaugiri*).—*Táluk* in the Jaipur *zamíndárí*, Agency Tracts, Vizagapatam District, Madras Presidency. A wild forest-clad region, watered by the Sabari and Sileru, and sloping from the Tulási Dangiri Hills, which separate it on the north from the Rámgiri *táluk*, to the Godávari. The *táluk* contains 390 villages, with 5425 houses, and (1881) 22,558 inhabitants, chiefly Kandhs and Kois; all, except 14, were returned as Hindus. Area, about 4000 square miles; average elevation above the sea, 1200 feet. There are some splendid *sál* and teak forests, and the whole tract abounds with large game. The town of Malkangiri, with a ruined mud fort, is situated in lat. 18° 19′ N., and long. 81° 53′ E. Population (1881) 586; number of houses, 126.

Malkápur.—*Táluk* of Buldáná District, Berár. Area, 790 square

miles; contains 2 towns and 297 villages. Population (1867) 145,015; (1881) 168,508, namely, 86,478 males and 82,030 females, or 213·3 persons per square mile. Number of houses, 31,911. Hindus numbered 154,036, or nearly 91 per cent.; Muhammadans, 13,316; Jains, 1119; Sikhs, 19; Christians, 9; and Pársís, 9. Two towns, Malkápur and Nandura, contain over 5000 inhabitants. Area occupied by cultivators, 445,140 acres. Total agricultural population, 123,319. In 1883, the *táluk* had 1 civil and 3 criminal courts; police stations (*thánás*), 3; regular police, 101 men; village watchmen (*chaukídárs*), 443. Total revenue of the *táluk*, £51,351; land revenue, £40,621.

Malkápur.—Town and railway station in Buldáná District, on the western frontier of Berar; situated in lat. 20° 53′ N., and long. 76° 23′ 20″ E., on the Nálgangá river; elevation above the sea, 900 feet. Population (1881) 8152, of whom 5330 were Hindus, 2654 Musalmáns, 150 Jains, 11 Sikhs, 4 Pársís, and 3 Christians.

Two *bandhs* or dams cross the Nálgangá, the smaller of which is said to have been constructed about 200 years ago, as a means of communication between the *pet* or suburb, on the other side, and the town. During the rainy season, the river surrounds the town on three sides; and the larger dam was intended to render the fourth side unapproachable except by water, and thus secure it against the Pindárís. A now dilapidated rampart of dressed stone—2350 yards in circuit with 5 gates and 28 bastions—surrounds the town; and in the west quarter there is a fort of earthwork. The Nágpur branch of the Great Indian Peninsula Railway runs 300 yards north of the town, and about the same distance east and north-east lie the Government buildings. The town is divided into 4 principal *páras* or quarters.

The present town of Malkápur is said to have been founded 400 years ago by a Muhammadan prince of the Farukhi house, who was led by a miracle to select the present site, to which he transferred the people of Patúr, which stood to the north-west, beyond the river, where the foundations can yet be traced. The new town was called Malkápur, after the prince's daughter. Malkápur is mentioned in the *Aín-i-Akbarí*, and was long the head-quarters of a *tálukdár*. In 1761 A.D. it was rich enough to pay Rs. 60,000 (say £6000), for exemption from plunder, to the army of Peshwá Raghunáth Ráo. The *táluk* of Malkápur being on the Nizám's frontier, and near the Sátpura hills, a large force (stated at 20,000 men) was generally quartered there. Daulat Ráo Sindhia and the Nágpur Bhonsla were encamped near Malkápur when the British envoy, Colonel Collins, after presenting General Wellesley's enforced acceptance of war, quitted Sindhia's camp on the 3rd August 1803.

There were once large gardens here, the trees and ruined wells of which still remain. An Assistant Commissioner holds his court at

Malkápur, and there is a *tahsíli*. Excellent school, police station, and post-office. A mosque near the Kázi's house is said to be older than the town.

Mallái (also known as *Majorganj* and *Halakhaura*).—Market town in Muzaffarpur District, Bengal; situated in lat. 26° 45′ N., and long. 85° 28′ 30″ E., on the main road from Maniári *ghát* to Sonbarsa. Site of a British cantonment during the Nepálese war in 1814. Population (1881) 1840. Police outpost station; vernacular school.

Mallangur.— Fortified hill in the Yelgandal District, Haidarábád State (Nizám's Dominions), Southern India. Lat. 18° 17′ 59″ N., long. 79° 22′ 22″ E. The hill rises 690 feet above the plain, and is 1701 feet above mean sea-level. On the west side of the hill is a precipice 200 feet high. The east is the only side by which the hill could be ascended, and that is strongly fortified. It is not garrisoned.

Malláni.—Division of Jodhpur State, Rájputána; bounded on the north by Jaisalmer (Jeysulmere) State and the Márwár Division of Jodhpur; on the east and south by Márwár; and on the west by Thar and Párkar District of Sind, and Márwár. Area, about 18,000 square miles. Population not returned separately in the Census Report of 1881.

A salient feature of the country is its sandhills. The whole of the northern and western portions forms part of the desert stretching into Sind and Jaisalmer. The sandhills in some places rise to an altitude of 300 to 400 feet. For ages, these wastes have been the grazing-ground of camels, cattle, goats, and sheep, tended by the hardy Balúch tribes, who combined this occupation with cattle-lifting. Water is found at 150 to 300 feet below the surface; but it is usually brackish, and in some spots deadly to man or beast. Wells and pools which are drinkable after the rains become noxious after March, and drinking water is then exceedingly scarce. Wherever a wholesome well exists, a village or hamlet springs up around it; to which the herdsmen flock in summer and pay dues for the use of the water. The people have a superstitious prejudice against the construction of new wells, and seek for old wells to repair. This prejudice has lately been strengthened by the fact that five new wells dug by Rájput shareholders turned out to be salt and useless.

The only river is the Lúni. The Bármer portion of Malláni contains three *jhíls* or marshes; in Takhtábád and Setras portions are 35 to 40 marshes. In favourable seasons, wheat is grown in their beds; and when the marshes become dry, wells are dug and a plentiful supply of water is procured. A few solitary hills and ranges are scattered over Mallání. No forests or large trees occur. *Multáni matti*, or fuller's earth, is found in considerable quantities, and exported to Umárkot in Sind, and to Jodhpur and Bíkaner. Ravine deer are seen all over the

country; antelope only in the neighbourhood of Jasol. Hares are occasionally seen. Among game birds are the large bustard, the grey partridge, the grey quail, and the large, the common, and the painted sand-grouse.

Malláni claims to be the home of the Rahtor race. When Kanauj fell before the Muhammadan arms, Asthán, the great-grandson of the last Rájá of that State, emigrated to Márwár with a body of his followers. In A.D. 1181 he established himself as ruler over Kher, a town near the banks of the Lúni, and the adjoining tract of Mewo (now called Malláni). After the conquest of Kher, the Rahtors do not appear to have acquired further territory in Malláni until the time of Mallináth, when the portions now known as Gúra and Nagar were conquered. In the 14th century a separation took place in the Rahtor tribe. One section founded the principality of Jodhpur, while the remainder continued to occupy their former position at Mewo or Malláni. The law of equal division among the sons of the property of the father at his death, created dissensions and blood-feuds, and led to the assistance of the neighbouring chiefs of Jodhpur being frequently solicited. This gave rise to an interference, on which the Jodhpur Rájá grounds his right of sovereignty over Malláni. No treaty or formal contract between the parties can be produced.

For many centuries past, Malláni was a continual scene of anarchy and confusion, and the inhabitants savage and lawless. The ruler of Jodhpur, when called upon to repress their excesses, acknowledged his inability to coerce them. Under these circumstances, the British Government, about 1836, found itself compelled to interfere. After the occupation of Malláni by the British, the principal chiefs were removed as prisoners, but they were subsequently released, on furnishing security for their good conduct. The sovereignty of Jodhpur over Malláni was subsequently recognised, although the country is still administered by a British political officer. The surplus revenues are handed over to the Mahárájá of Jodhpur.

The principal crops of the country are *bájra*, *múg*, *joár*, *tíl*, and cotton. Manufactures of wool and cotton cloth. Chief towns—Bármer, Jasol, Sindari, and Nagar. Malláni suffered most severely during the Rájputána famine of 1868–69, and it has been computed that the loss of life caused by famine in those years amounted to one-fourth of the total population.

Mallánpur.—Town in Sítápur District, Oudh; situated 41 miles north-east of Sítápur town, with which it is connected by a good road. Founded about 400 years ago by a Kurmí named Mallán, but subsequently taken possession of by Raikwárs, who still hold it. Population (1881) 3482, residing in mud houses, the only masonry building being the residence of the *tálukdár*. Good bi-weekly market; boys' school.

Mallánwán.—*Parganá* in Hardoi District, Oudh. Bounded on the north by *parganá* Bangar; on the east by Sandíla and Bálamau, the Sai river forming the boundary line; on the south and south-west by Bangarmau and Kachhandán; and on the north-west by Bílgrám. Area, 136 square miles. Population (1869) 77,681; (1881) 72,792, namely, males 38,472, and females 34,320. The most numerous caste are Kurmís. The castes next in number are Bráhmans, Chamárs, Ahírs, and Rájputs. Of the 123 villages comprising the *parganá*, 29 are held by Muhammadans, 48 by Rájputs, and 21 by Bráhmans. The tenure is mainly *zamíndárí*. The Government land revenue demand, excluding cesses, is £10,229, equal to a rate of 3s. 11¼d. per cultivated acre, or 2s. 4⅛d. per acre of total area. The area under cultivation is returned at 60·79 per cent. of the whole, besides 4·89 per cent. under groves; 16·21 per cent. is cultivable, and 18·11 per cent. uncultivable waste. The principal crops are barley and *bájra*, covering about half the cultivated area; wheat occupies about one-sixth; *joár* and gram another sixth; while the remainder is mainly occupied with rice, *arhar*, sugar-cane, cotton, indigo, tobacco, and poppy. The *parganá* is well provided with road communication; and several villages contain aided and primary schools.

Mallánwán seems to have been originally in the hands of the Thatheras, who were expelled by Rájput immigrants at some unknown period before the Muhammadan conquest of Kanauj. It afterwards fell within the track of the invasion of Sayyid Sálár Masáúd (1033 A.D.). The tomb of one of his companions is pointed out in the town of Mallánwán; and the Shaikhs claim to have sprung from an early Muhammadan settlement made at the time of this inroad. Tradition also connects Mallánwán with Jai Chand, the Rájput king of Kanauj, who is said to have quartered his wrestlers (*mál*) here. Many persons derive the name Mallánwán from this fact. A more popular account, however, is that when the Ghori invader marched through on his triumphant return from Kanauj, certain Ahírs conciliated him with an offering of cream (*malái*), which pleased him so much that he forthwith ordered a colony to be settled here, which he called Mallánwán in memory of the event.

Mallánwán.—Town in Hardoi District, Oudh, and head-quarters of Mallánwán *parganá*; situated 21 miles south of Hardoi town, on the road from Hardoi to Unao. Lat. 27° 2′ 10″ N., long. 80° 11′ 30″ E. Population (1869) 11,670; (1881) 10,970, dwelling in 180 brick and 1366 mud houses. Hindus number 8604, and Muhammadans 2366. The town is divided into 6 wards or *mahallas*.

Under native rule, Mallánwán possessed considerable political importance; and at the time of the British annexation of Oudh, it was selected as the civil head-quarters of what now forms Hardoi District,

the site being removed from Mallánwán to Hardoi upon the re-occupation of the Province after the Mutiny. The town has but little commerce, the grain trade of the neighbourhood being carried on at Madhuganj, 5 miles distant. A deserted indigo factory occupies the site of the old fort. The manufacture of saltpetre has been recently introduced. Bi-weekly market, and manufacture of brass utensils. The principal buildings are—4 mosques; the *dargah* or tomb of a famous Muhammadan saint, Makhdum Sháh; 2 *imámbáras;* 14 Hindu temples; and a mud *sarái* or travellers' rest-house.

Mallia.—Petty State in Káthiáwár, Bombay Presidency.—*See* MALIA.

Malligaon.—Town in the Bidar District, Haidarábád State (Nizám's Dominions), Southern India. Lat. 18° 39′ 8″ N., long. 77° 4′ 8″ E. Malligaon is celebrated for its annual horse fair, which is held usually in November or December. Upwards of 4000 horses and ponies are disposed of at the fair for prices ranging from £5 to £60. In addition to horses and horned cattle, piece-goods, cloth of all kinds, hardware, and household utensils of all descriptions are sold.

Málnipahár.—Hot spring in Monghyr District, Bengal, forming the source of the Anjáná river. It is situated about 7 miles east and north from Bhímbándh, and issues from the bottom of Málnipahár, a part of the central cluster of the Monghyr Hills. A space of about 20 yards in length and 20 feet in width is covered with fragments of rock, under which the water may be heard running, and in some places seen through the crevices, until it comes to the lower side and forms into little streams that soon unite. The stones from among which the water issues are a kind of jasper, stained with red. The temperature of the water varies from about 145° to 150° F.

Malondi.—Town in the Bassein Sub-division of Thána District, Bombay Presidency. Part of the modern town of Bassein has been built on lands of Malondi. Population not separately returned in the Census Report of 1881.

Native Infantry were despatched to Málthon; but finding the Rájás of Sháhgarh and Bánpur were approaching with a large force, they returned to Ságar. The town and fort were then occupied by the Rájá of Sháhgarh, who traced his descent from Prithwí Singh; but in January 1858 he decamped on learning the defeat of the Rájá of Bánpur at Barodiá Naunagar. Population (1881) 2219, namely, Hindus, 1791; Jains, 348; and Muhammadans, 80. A weekly market is held at Málthon. The road from Ságar to Lálitpur and Jhánsi runs through the town, and there is a travellers' bungalow near the fort. A boys' school and one for girls have been established.

Málur.—*Táluk* in Kolár District, Mysore State. Area, 154 square

Málpur.—Native State under the Political Superintendency of Mahi Kántha, Gujarát (Guzerát), Bombay Presidency; situated in the

south-eastern portion of Mahi Kántha. Population (1872) 10,303; (1881) 14,009. The boundary marches with the State of Lunáwára and Ahmadábád District. The country is hilly and wild, and its exact area has not been ascertained. The principal agricultural products are *bájra* (millet), wheat, and other grains. The Málpur family is an offshoot of that of the Ráo of Edar (Idar). Virájmal, younger son of Kírat Singhjí, 7th Ráo of Edar, was provided for by a grant of lands, and in 1344 his grandson, Khánají, established himself at Mán. Khánají's grandson, Randhír Singhjí, moved from Mán to Morása; and it was not till 1466 that Ráwal Wágh Singhjí, great-grandson of Randhír Singhjí of Morása, and eighth in descent from Virájmal, finally settled at Málpur. At that time, Málpur was ruled by a Bhíl chief named Málo Kánt. A certain Bráhman of Málpur had a beautiful daughter with whom Málo Kánt had fallen in love. The Bráhman fled to Morása, and begged the assistance of the ruling chief, Wágh Singhjí, who shortly afterwards attacked and conquered Málpur, where his descendants have ruled as Ráwals ever since. In 1780, during the reign of Indar Singhjí, Fateh Singh, then Gáekwár of Baroda, attacked and captured Málpur and took away its gates; and since then the Ráwals of Málpur have paid an annual tribute to the Gáekwár. It was during the rule of Ráwal Takht Singh, in 1816, that the chief of Edar stayed at Málpur; and since then the Ráwals have paid tribute to Edar. The present (1881–82) chief is Ráwal Dip Singhjí, a Hindu of the Ráhtor Rájput caste, who reckons twenty-three generations from Kírat Singhjí. He manages his estate in person, but has no *sanad* authorizing adoption; in matters of succession, the rule of primogeniture is followed. Estimated gross annual revenue, £1163. The chief pays an annual tribute of £43 to the British Government, £39 to the Ráo of Edar, and £28 to the Gáekwár of Baroda. There is one school, with a total of 96 pupils. Transit dues are levied in the State.

triumphant return from Kanauj, certain Ahírs conciliated him with an offering of cream (*malái*), which pleased him so much that he forthwith ordered a colony to be settled here, which he called Mallánwán in memory of the event.

Mallánwán.—Town in Hardoi District, Oudh, and head-quarters of Mallánwán *parganá;* situated 21 miles south of Hardoi town, on the road from Hardoi to Unao. Lat. 27° 2′ 10″ N., long. 80° 11′ 30″ E. Population (1869) 11,670; (1881) 10,970, dwelling in 180 brick and 1366 mud houses. Hindus number 8604, and Muhammadans 2366. The town is divided into 6 wards or *mahallas.*

Under native rule, Mallánwán possessed considerable political im-

Area, 574 square miles, containing 69 villages. Population (1872) 55,084; (1881) 58,332, namely, 29,357 males and 28,975 females, occupying

7960 houses. Hindus numbered 55,831; Muhammadans, 1945; and 'others,' 556. Málsiras is mostly flat and bare of trees, except in the west, where is a chain of hills. Water is not plentiful. The chief rivers are the Nira and Bhima. Most of the soil is good black. The climate is dry and hot, and the rainfall scanty and uncertain. The detail survey of the Sub-division had not in 1883 been finished. In 1882–83, including alienated lands, the total number of holdings was 3766, with an average area of about 70 acres. Of 214,794 acres held in 1881–82 for tillage, 36,560 were fallow or under grass. Of the remaining 178,234 acres, 4077 acres were twice cropped. Grain crops occupied 153,533 acres; pulses, 8080 acres; oil-seeds, 18,080 acres; fibres, 813 acres; and miscellaneous crops, 1805 acres. In 1883 the Sub-division contained 1 civil and 2 criminal courts; police stations (*thánás*), 3; regular police, 38 men; village watchmen (*chaukídárs*), 200. Land revenue (1882), £15,322.

Málsiras.—Head-quarters of Málsiras Sub-division, Sholápur District, Bombay Presidency. Population (1881) 3087. Situated on the Poona-Sholápur road about 70 miles north-west of Sholápur town. Post-office, and Tuesday weekly market.

Málthon.—Chief town of a tract of the same name in Ságar (Saugor) District, Central Provinces; situated in lat. 24° 19′ N., and long. 78° 34′ E., about 40 miles north of Ságar town, on the southern slope of the Narat *ghát* or pass. The ascent is gentle, and is commanded by the fort. About 1748, Prithwí Singh of GARHAKOTA took possession of the village in the name of the Peshwá, and altered its site to where it now stands; he also built the fort. In 1811, his descendant Rájá Arjun Singh made over Málthon and Garhákotá to Sindhia, in return for his assistance in expelling the army of the Rájá of Nágpur from Garhákotá. In 1820, shortly after the cession of Ságar District by the Peshwá, Málthon was assigned by Sindhia to the British in exchange for other territory. During the disturbances of 1857, two companies of the 31st Native Infantry were despatched to Málthon; but finding the Rájás of Sháhgarh and Bánpur were approaching with a large force, they returned to Ságar. The town and fort were then occupied by the Rájá of Sháhgarh, who traced his descent from Prithwí Singh; but in January 1858 he decamped on learning the defeat of the Rájá of Bánpur at Barodiá Naunagar. Population (1881) 2219, namely, Hindus, 1791; Jains, 348; and Muhammadans, 80. A weekly market is held at Málthon. The road from Ságar to Lálitpur and Jhánsi runs through the town, and there is a travellers' bungalow near the fort. A boys' school and one for girls have been established.

Málur.—*Táluk* in Kolár District, Mysore State. Area, 154 square miles, of which 111 are cultivated. Population (1871) 56,581; (1881) 42,915, namely, 20,998 males and 21,217 females. Hindus numbered

40,876; Muhammadans, 2025; and Christians, 14. Land revenue returned at £8369, or 2s. 5d. per cultivated acre. The *táluk* lies along the watershed separating the valleys of the Pálár and South Pinákini. The Bangalore branch of the south-west line of Madras Railway traverses the *táluk*.

Málur.—Village in Kolár District, Mysore State; 18 miles south-west of Kolár, and a station on the Bangalore branch of the south-west line of the Madras Railway. Head-quarters of the Málur *táluk*. Lat. 13° 43′ 20″ N., long. 75° 22′ 35″ E. Population (1881) 2875. Originally called Mallikapura or 'jasmine town.' Held in the 16th century by the Gauda chiefs of Hoskote. Successively passed under the power of the Muhammadans of Bijápur and the Maráthás, until annexed to Mysore by Haidar Alí. Weekly fair on Thursdays. Roads to Hoskote, Masti, and Hosúr in Salem District.

Malur (or *Molúr*).—Village in Magadi *táluk*, Bangalore District, Mysore State. Lat. 13° 5′ N., long. 77° 58′ 20″ E. Population (1881) 1952, of whom the majority are Srí-Vaishnava Bráhmans. Known as Mukunda-nagar or Mankundapatna in the 7th century, and the residence of two of the Ganga kings, whose capital was at TALKAD. The sage, Vijnáneswara Yogi, here composed his celebrated *bháshya* or commentary on the code called *Yajnavalkhya Smriti*. There are several ruined temples, but the large temple of Aprameya-swámi is still maintained in good order.

Malvalli.—*Táluk* in Mysore District, Mysore State. Area, 383 square miles. Population (1871) 74,985; (1881) 83,045, namely, 40,890 males and 42,155 females, of whom 80,347 are Hindus, 2692 Muhammadans, and 6 Christians. Land revenue (1874–75), excluding water rates, £5740, or 1s. 7d. per cultivated acre. Sheep-breeding is extensively carried on by the Kurúba and Gollá castes, and iron is manufactured in the *táluk*. The Káveri (Cauvery) forms the southern boundary, and receives the Shimsha, which drains the country. Neither of these rivers is used for irrigation, which is carried on only by means of tanks.

Malvalli.—Town in Mysore District, Mysore State; situated in lat. 12° 23′ 10″ N., and long. 77° 5′ 50″ E., 28 miles by road east of Mysore city. Population (1881) 5078, of whom 4511 are Hindus, 561 Muhammadans, and 6 Christians. Granted by Haidar Alí to his son Tipú in *jágír*. The old fort, built of mud and stone, is now in ruins. Two miles off is the scene of the only battle between the British army under General Harris and Tipú Sultán in 1799, when the former was marching to the attack on Seringapatam. Head-quarters of the Malvalli *táluk*.

Málwá.—A political province of Central India, forming the southern portion of the Central India Agency, exclusive of the districts south of the Vindhya range. Málwá is the richest part of Central India,

and has never in historical times been known to suffer from famine caused by drought. The principal States in Málwá are, Indore, Bhopál, Dhár, Ratlám, Jáora, Rajgarh, Narsinghgarh, and the Nímach (Neemuch) District of the State of Gwalior. [See separate articles.]

In pre-historic times, the capital was at the ancient city of UJJAIN (Oojjein), associated in Hindu legend with the great king Vikramáditya, the date of whose accession (57 B.C.) has given the *Samvat* era to all India. The Muhammadan chronicler, Ferishta, describes Málwá as the kingdom of an independent Rájá, when Mahmúd of Ghazní invaded India in the beginning of the 11th century. It appears to have first fallen into the hands of the Muhammadans in about 1309, during the reign of the Delhi Emperor Alá-ud-dín. When the Tughlak dynasty was weakened by the repeated attacks of the Mughals, their viceroy in Málwá succeeded in establishing his independence. The first Muhammadan king of Málwá was Diláwar Khán Ghori, of Afghán origin, who ruled from 1387 to 1405, and placed his capital at MANDU. He was succeeded by his son Hoshang Ghori, to whom are attributed most of the magnificent buildings, ruins of which are still to be seen at Mandu. In 1526 the Ghori dynasty came to an end, being overthrown by Bahádur Sháh of Gujarát; and in 1570 Málwá was, on the conquest of Gujarát by the Emperor Akbar, incorporated in the Mughal dominions.

On the decay of the Delhi Empire of the Mughals, in the 18th century, Málwá was one of the first Provinces overrun by the Maráthás. In 1737 the Peshwá exacted *chauth*, or one-fourth of the revenue; and at a later date, the two great military chiefs, Sindhia and Holkar, carved out for themselves kingdoms, which their descendants still retain. But the Maráthás set up no organized government, so that Málwá, besides its native population of predatory Bhíls, became the refuge of all the mercenary bandits of the Peninsula. In the beginning of the present century, the depredations of these bandits or Pindárís led to what is sometimes known as the fourth Maráthá war of 1817, under the Governor-Generalship of Lord Hastings. As the result, the Pindárís were extirpated; and under the rule of Sir John Malcolm, the Bhíls were tamed and the jungles cleared of wild beasts. Many of the Bhíls have been enlisted as British soldiers; and the head-quarters of the Málwá Bhíl Corps (about 400 strong) is at Sardárpur. At the present day, Málwá is best known as giving its name to the opium which is annually exported from Bombay, to the amount of about 37,000 chests.

Málwá Agency, Western.—A group of native States, forming a Political Agency in Central India, comprising the States of JAORA, RATLAM, SILLANA, and SITAMAU (all of which see separately), and as regards intercriminal jurisdiction, the Districts of UJJAIN, SHAHJAHAN-

PUR, AGAR, MANDSAUR (Mandesar), and NIMACH (Neemuch) of Gwalior or Sindhia; the District of RAMPURA, and the *parganás* of Mehidpur, Kaitha, and Tarána of Indore or Holkar; the *parganás* of Alaut (senior branch), Ringnaud and Gurgachha (junior branch) of Dewás; the *parganá* of Piráwa of Tonk; and the *parganás* of Awar, Pachpahár, Dag and Gangrár of Jhálawár. The rights also of the following *thákurs* are guaranteed by the British Government, viz. Ajranda, Barra, Bichhraud, Bilanda, Dábri, Datána, Dhulatia, Jawásia, Kálukhera, Sálgarh, Narwar, Nángáon, Naulána, Panth-Piploda, Piplia, Piploda, and Sheogarh. The area of the whole Agency is about 12,000 square miles, and the population (1881) about 1,511,324. The head-quarters of the Agency are at Agar, and the Political Agent is also Sessions Judge of Nímach. The following article has been compiled from information officially supplied; but it deals with native territories, and does not attempt to bring down the statistics to date.

Physical Aspect.—The country is undulating, scattered over with low hills, and intersected by numerous streams. There is abundance of jungle, consisting of bamboo, brushwood, and undergrowth, and affording shelter to tiger, leopard, bear, hog, deer, and pea-fowl; but recently such land as is arable is gradually being brought under cultivation. All the rivers, except one, take a northerly course and fall into the Chambal, the largest river in the region. They in no place expand into lakes. They are fordable at all times except during rare high floods. No minerals for marketable purposes are quarried, except stone for building and iron for local use. Iron is mined and worked at Ját in the *parganá* of Singoli (Nímach), and at Parda in the *parganá* of Parda (Rámpura). Stone for building is quarried at Mandsaur and Bambúri. There are no extensive forests of large growth. Average annual rainfall, 38 inches.

Geology.—The greater portion of Western Málwá is covered by the Deccan trap, one of the most widely spread formations in India. It is of volcanic origin, and composed of horizontal or nearly horizontal beds of basalt and similar rocks. To the peculiarities of this trap the physical characteristics of the country are chiefly owing. The flat-topped hills, the distinct horizontal stratification forming terraces on the hill-sides, the numerous boulders scattered over the surface, the prevalent dark colour of every scarp in which rock is exposed—all are typical of a volcanic area. It is probable that in early tertiary times the whole of Málwá was a single sheet of volcanic rock. The peculiar rock called laterite, so common over all India, is also found in Málwá. Of laterites, roughly speaking, there are two kinds, the high-level and the low-level. The latter is the more common. The former is a more ferruginous composition, and is found on the summits of the most elevated Deccan peaks. It has peculiar powers of

resisting the effects of weather and decomposition. It is extensively found in the Málwá uplands, and is well exposed at Agar. Coralline limestone, a good building stone, is quarried at Chirakán. Here are still visible the ancient quarries from which was obtained the stone employed in building the historical city of Mandu on Mandogarh. It was the discovery of fossiliferous limestone among the ruins of Mandu that led to the disclosure by Colonel Keating of the fossiliferous beds of Chirakán and Bág. The alluvial deposits of the Narbadá (Nerbudda) near Mandlesar and Maheswar occupy a large area. This area is in many places covered with rich black soil, said to be here derived from the decomposition of the trap. The best iron worked is of the Bijáwar formation. An attempt was made by Government to smelt iron on a large scale at Burwáha, and with fair success. Unfortunately, before the experiment was completed, it was abandoned.

Population, Agriculture, etc.—The races inhabiting the Western Málwá country are Sondiahs, Rájputs, Bhíls, Kuturís, Anjnas, and Ahírs—all of them cultivators. The Moghias, a scattered, scanty, and thievish race, are immigrants from Mewár (Meywar) or Udaipur. The Ahír and Anjna cultivators are as a rule prosperous. The general physique is good. The food of the people is extremely simple—principally consisting of the flour of *joár*, made into thick cakes and eaten with the dried leaves of the opium plant. In times of scarcity, between harvests mostly, they live on the *korinda* berry, eaten whole and uncooked. The ordinary dress is a *dhoti* or waist-cloth, a jacket, and a sheet. The better classes wear sleeves. Gold ear-rings are worn by all well-to-do classes. The typical house is built of mud. The roof is flat, and made of palm-leaves overlaying palm-tree beams. In many parts, however, the roofs are beginning to be tiled and gabled. In order to have as little ventilation as possible, there is usually only one door. The average expenses of the middle-sized household of a fairly prosperous tradesman are about £1 monthly; of a fairly prosperous cultivator's family, about 12s. The peasantry are generally in debt.

The staple crop is *joár;* subsidiary but important crops are wheat, barley, *bájra*, pulses (*chola*, gram, peas, linseeds), fibres (hemp, cotton), sugar-cane, *ál* (Morinda, *var.* 1st citrifolia, *Roxb.*), and opium. *Joár* is sown in June or July, and harvested in January. *Pan* (Piper betle, *Linn.*) is raised in the neighbourhood of Ratlám. Opium is sown in November on irrigated land only; it requires eight waterings, and is gathered in February—March. Prices are as follows for agricultural stock—a pair of bullocks, £7, 10s.; milch buffalo, £4; cow, £1, 10s.; goat, 6s.; sheep, 4s. The capitalized value of the stock and implements of an average holding is about £16. Prices

current:—Rice, 24 lbs. per rupee (2s.); *joár*, 80 lbs. per rupee; wheat, 44 lbs. per rupee; salt, 16 lbs. per rupee; Indian corn (maize), 90 lbs. per rupee; sugar-cane, ½d. per cane; fermented liquor (from the *mahuá*), 6d. or 9d. the English quart bottle. There are no standard weights, solid or liquid measures, but weights and measures vary in different localities. Distance is measured by the *kos*, nominally 2 miles. The *bíghá* is the unit of land measurement, but it also varies with the locality. Generally speaking, the *bíghá* contains 100 *háths*, each *háth* (from the elbow to the finger tips) being reckoned at 20 inches. Women and children of all classes (except of the Bráhman and Baniya castes) work in the fields, and are paid in kind 2 lbs. or 4 lbs. of grain daily, as wages fall and rise.

There are several descriptions of tenure. In Sindhia's territory the settlement is with *lambardars*, who are accountable for the revenue, and receive in return for the responsibility certain amounts of land rent-free, never less than 8 or 9 acres. In Holkar's territory, the villages are subjected to a system of farming the revenues for short periods. Elsewhere it is a common custom for the landholder to let his land on condition of supplying half the seed and receiving half the crop, out of which the assessment is paid. It is calculated that an ordinary cultivator under this system never earns more than 10s. monthly. For irrigated land the highest rent is £3, 18s. per acre, and the lowest £1, 10s.; the average rent for irrigated land is £2, 7s. per acre; for unirrigated *joár* land, from 6s. 3d. to 1s. 7d. per acre. About 17 tons of manure are required annually for an acre of irrigated land. When manure fails, hemp is grown and the blossom ploughed into the soil. There is no rotation of crop on manured and irrigated land; on dry crop, or *mál* land, the rotations are cotton and oil-seed, or *joár* (a cereal) and gram (a pulse). Crops are sometimes injured by excessive rain or by excessive rain followed by bright sun for several days; and from these two causes, though not from drought, scarcities have occurred. A scarcity occurred in 1864 owing to excessive rains in the years preceding, commencing with the year 1859; in 1864, the normal price of *joár* being 2s. for 80 lbs., the same sum only purchased 16 lbs. In the rainy season, too, prices annually rise owing to impeded transport from Bhopál, whence surplus supplies, particularly of wheat, are imported. Scarcity begins when *joár* can only be procured at the rate of 32 lbs. for 2s.; it becomes very intense when 2s. will only buy 20 lbs.

Communications, Trade Relations, etc.—The main roads, few in number, connect Indore with Námach (Neemuch), and Indore with Agra; but of late years the traffic on the former has lessened owing to the opening of the Málwá line of the Rájputána-Málwá State Railway. Cross communications are particularly wanting. Till recently the only

minor roads consisted of a short line, 23 miles long, between Ujjain and Dewás on the Agra high road, and another, 41 miles long, linking Agar with the railway station at Ujjain. The development of the railway system is now improving this backward state of things.

Opium and cotton are the sole manufactured exports of Málwá, but the export of opium, besides being the most important of the two, is a main item among the exports of India to China. The trade in opium is carried on at those marts in Málwá where opium scales have been established, and where Government receives the opium duty and grants an opium pass. These stations are at Mandsaur, Jáora, Ratlám, Ujjain, and Indore. There is also an export trade in cattle with Gujarát and the Deccan. The fairs for this trade are held at Jhálrá and Tarána in Indore, at Sitamau, Sháhjahánpur, and Baragáon in Gwalior. A horse fair has recently been established at Agar. The out-turn of opium in Jáora and Sailána, two of the most important opium districts, was, in 1881-82, 269,200 lbs., and of cotton, 102,560 lbs. No grain is exported. The exports and imports are about equal in total value for the Province.

There appears to be little desire to accumulate wealth. The first thing thought of by a cultivator or tradesman who can afford it is a visit to Onkar on the Narbadá or to Soronghát on the Ganges, to deposit at either place the bones of his deceased ancestors. On his return he gives a feast, and to each guest he presents a brass plate in commemoration, with the name of the donor and the date engraved upon it. As there is small thrift, the husbandman lives much on credit. Advances are made to him by the village *baniyá* or shop-keeper for the support of his family from the commencement of cultivation in June until September, when the Indian corn crop is ripe. In November, when the *joár* is ripe, the debt is repaid in kind with 25 per cent. interest. Any balance due the *baniyá* is paid from the surplus, if any, of the next year. But the balance, no matter how considerable, that becomes due owing to a succession of bad seasons, is considered to be cleared completely by the payment of four times the original quantity of grain or money advanced. The annual rates of interest on money lent vary. On the security of jewellery, money may be had for from 9 to 13½ per cent.; on personal security the rate of interest never falls below 9 per cent.; the lowest interest among bankers in their mutual dealings is 6 per cent. There is little traffic in land, but land is frequently taken in mortgage. The return expected is 24 per cent. Loans to the members of the great mass of cultivators are conducted through the village shopkeeper, who in turn borrows from the larger banking firms. A cultivator pays as interest on money borrowed never less than 12 and rarely more than 24 per cent.

The most important towns in Western Málwá are—AGAR (6193), with a British cantonment and the head-quarters of the Central India Horse; Bhanpura, where Jeswant Ráo Holkar died after his flight from the Punjab; Barnagar (7908); Jawud, a banking centre; Jáora (19,902), with opium scales and railway station; Mehidpur (8908), where in 1817 Sir John Malcolm defeated Holkar; Mandsaur (22,596), with a large opium trade; Nímach (Neemuch), (13,069), with a British cantonment; Ujjain (32,932), one of the holiest and most historic cities of the Málwá region; Rámpura, the cradle of the Chandrawat Rájputs; Ratlám (31,066), a great opium centre; Sailána; Sháhjahánpur (9247); Sitamau (5764); and Tarána, with a trade in wheat.

Málwán.—Sub-division of Ratnágiri District, Bombay Presidency. Bounded on the north by Deogarh Sub-division; on the east by Sáwantwári State; on the south by the Karli creek; and on the west by the Arabian Sea. Area, 238 square miles. Population (1872) 123,273; (1881) 84,663, namely, 39,662 males and 45,001 females. Hindus numbered 82,166; Muhammadans, 1391; and 'others,' 1106. There are 57 villages and 1 town; occupied houses, 14,015; unoccupied, 3259.

The Málwán Sub-division forms a considerable stretch of the Ratnágiri seaboard, intersected by the Kolamb and Kálávali creeks. The interior is a series of rugged hills and rich valleys. Rice and sugar-cane are grown along the Karli and Kálávali creeks. The headland of Rájkot at Málwán offers a secure harbourage to small steamers and country craft which anchor in Málwán Bay. The bay is dangerous to vessels without a pilot. The climate is on the whole healthy. The annual rainfall averages about 85 inches. The supply of water, for drinking and other purposes, is abundant. The Karli and Kálávali creeks are navigable by small craft for 20 miles.

The chief ports on the Málwán seaboard are Deogarh, Achra, and Málwán, forming the Málwán customs division. The annual average value of the imports at these ports for the five years ending 1882–83 amounted to £52,153, and of the exports to £41,174. In 1882–83 the imports were valued at £50,550, and the exports at £39,623.

Of the 62,449 acres under tillage in 1878, grain crops (mainly rice) occupied 73·2 per cent.; pulses, 7·3 per cent.; oil-seeds, 5·1 per cent.; fibres (mostly Bombay hemp), 0·65 per cent.; and miscellaneous crops, 8481 acres. In 1883, the Sub-division contained 1 civil and 2 criminal courts; police stations (*thánás*), 4; regular police, 50 men.

Málwán.—Chief town of the Málwán Sub-division of Ratnágiri District, Bombay Presidency; situated 70 miles south of Ratnágiri town, in

several Government offices, the town contains a good club. Early in the century it was a military outpost, and in 1802 the garrison was massacred by the Kotiote rebels.

Manapád Point. — Promontory in Tenkarai *táluk*, Tinnevelli District, Madras Presidency. Lat. 8° 23′ N., and long. 78° 3′ E.; about 30 miles south of Tuticorin. A high sandy promontory, based on rock, jutting boldly into the sea, and having a small white-washed church on its summit, visible in clear weather for 12 or 13 miles. The breakers

once the inner island, now part of the mainland, is situated, almost hidden in palms, the old town of Málwán. The modern town of Málwán has spread far beyond the limits of the former island. Within the boundaries of the town, on rising ground surrounded on three sides by the sea, is Rájkot Fort. Málwán was formerly a stronghold of the Maráthá pirates, but in 1812 it was, under the treaty of Karvir, ceded to the British Government by the Rájá of Kolhápur. Towards the close of 1812, Colonel Lionel Smith completely extirpated the pirates. Vengurla has of late become the outlet for the trade of Belgáum, instead of Málwán. Iron-ore of good quality has been found in the neighbourhood, and salt is made near the town. Average annual value of trade at the port of Málwán for the five years ending 1881–82—imports, £36,660; exports, £25,090. Sub-judge's court, post-office, and six schools, with 716 pupils in 1883–84.

of Manar Gulf—from Cape Comorin, the southernmost point of the peninsula of India, to Point de Galle, the southernmost point of Ceylon—is about 200 miles. The length of the Tinnevelli and Madura coast to Adam's Bridge is 135 miles. A current sets into the Gulf during the south-west monsoon. During December and January the north-east monsoon blows strong out of the Gulf. About the changes of the monsoons, westerly winds often prevail between Cape Comorin and Ceylon, accompanied at times by a current setting into the Gulf.

District forms the eastern part of the Chutiá Nágpur Division. It is bounded on the north by the Districts of Hazáribágh and the Santál Parganás; on the east by Bardwán and Bánkurá; on the south by Singbhúm and Midnapur; and on the west by Lohárdagá and Hazáribágh. A considerable portion of the northern and north-eastern boundary is marked by the Barákhar and Dámodar rivers; while, on the west and south, the Subarnarekhá river divides the District from Lohárdagá and Singbhúm. The administrative head-quarters are at PURULIA.

Physical Aspects.—Mánbhúm forms the first step of a gradual descent from the table-land of Chutiá Nágpur to the delta of Lower Bengal. The undulations which are so characteristic of Chutiá Nágpur here become less pronounced, and follow each other at longer intervals than in the other Districts of the Division, while level tracts of considerable

the pearl-diver's operations are exceedingly simple; consisting of a stone, about 30 pounds in weight, to accelerate the rapidity of his descent; and a network basket, which he takes down to the bottom, and fills with the oysters as he collects them. This, on a concerted signal, is hauled to the surface. The divers do not ordinarily remain a full minute below water, and the most expert cannot continue at the bottom over 90 seconds, nor work at a greater depth than 13 fathoms. 'The Gulf of Manar abounds with sharks; but hardly more than one accident is known to have occurred from these creatures during any pearl fishery since the British have had possession of Ceylon.'—Commander Taylor's *Sailing Directory* (London, 1874), p. 415.

Manás.—River of Assam, which takes its rise far up in the Bhután Hills, and flows south into the Brahmaputra. It is navigable up to the foot of the hills by native craft all the year round, and might be navigated by river steamers of light draught. Like all the neighbouring streams, its course in the plains is liable to great and frequent changes. The main channel forms the boundary between the Eastern Dwárs of Goálpárá District on the west or right bank, and Kámrúp District on the east. It enters the Brahmaputra in lat. 26° 15′ N., and long. 90° 41′ E., just opposite Goálpárá town. Its chief tributaries are—on the right bank, the Aí, Búri-Aí, the Gabúr, Kánámákrá, and the Doláni; on the left bank, the complex river system of which the Chául-khoyá is now the chief drainage channel. The Manás is nowhere fordable in the plains, but it is crossed by 8 ferries situated at different points.

Manása (*Monassa*).—Town in Indore State, Central India; situated in lat. 24° 27′ N., and long. 75° 13′ E., on the route from Gúna (Goona) to Nímach (Neemuch), 162 miles west of the former and 18 east of the latter. Elevation above the sea, 1440 feet.

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Málwán.—Chief town of the Málwán Sub-division of Ratnágiri District, Bombay Presidency; situated 70 miles south of Ratnágiri town, in

The jungle products of Mánbhúm are the same as those of the adjoining District of HAZARIBAGH. Tigers, leopards, bears, wolves, and jackals are not uncommon, while various kinds of deer abound, and the bison is occasionally heard of in the south of the District. Elephants come every year from the south-east into the hilly country between Mánbhúm and Singhbhúm. The short-tailed *manis* (Manis crassicaudata *vel* pentadactyla), which, owing to its peculiar habits, is one of the least known quadrupeds in India, is occasionally found in the jungles bordering on Singhbhúm. This curious animal has been described by Lieutenant R. S. Tickell in the *Journal of the Asiatic Society* for 1842, and his account of it is quoted in the *Statistical Account of Bengal*, vol. xvii. pp. 266–268.

Administrative History.—The territory comprised in the present District of Mánbhúm was acquired by the British, with the grant of the *diwání* of Bengal, Behar, and Orissa, in 1765, and was occupied by us

Manaung.—Island and town in Kyauk-pyu District, Arakan Division, British Burma.—*See* CHEDUBA.

Manawadar.—Chief town of Bántwa State, in the Soráth division of Káthiáwár, Gujarát, Bombay Presidency; 4 miles east of Bántwa and 22 south-west of Junágarh. Population (1881) 2482. The estate consists of 52 villages.—*See* BANTWA.

Mánáwáo.—Petty State in the Soráth division of Káthiáwár, Bombay Presidency, consisting of 1 village; 20 miles south of Amreli and 12 south-west of Kundla. Area, 5 square miles. Population (1881) 528. Estimated revenue in 1881, £150; tribute of £14, 18s. is paid to the Gáekwár of Baroda, and £2, 6s. to the Nawáb of Junágarh.

Mánbhúm.—British District in the Lieutenant-Governorship of Bengal, lying between 22° 37′ and 24° 3′ N. lat., and between 85° 51′ and 87° 16′ E. long. Area (1881), 4147 square miles. Population, according to the Census of 1881, 1,058,228 souls. Mánbhúm District forms the eastern part of the Chutiá Nágpur Division. It is bounded on the north by the Districts of Hazáribágh and the Santál Parganás; on the east by Bardwán and Bánkurá; on the south by Singbhúm and Midnapur; and on the west by Lohárdagá and Hazáribágh. A considerable portion of the northern and north-eastern boundary is marked by the Barákhar and Dámodar rivers; while, on the west and south, the Subarnarekhá river divides the District from Lohárdagá and Singbhúm. The administrative head-quarters are at PURULIA.

Physical Aspects.—Mánbhúm forms the first step of a gradual descent from the table-land of Chutiá Nágpur to the delta of Lower Bengal. The undulations which are so characteristic of Chutiá Nágpur here become less pronounced, and follow each other at longer intervals than in the other Districts of the Division, while level tracts of considerable

the pearl-diver's operations are exceedingly simple; consisting of a stone, about 30 pounds in weight, to accelerate the rapidity of his descent; and a network basket, which he takes down to the bottom, and fills with the oysters as he collects them. This, on a concerted signal, is hauled to the surface. The divers do not ordinarily remain a full minute below water, and the most expert cannot continue at the bottom over 90 seconds, nor work at a greater depth than 13 fathoms. 'The Gulf of Manar abounds with sharks; but hardly more than one accident is known to have occurred from these creatures during any pearl fishery since the British have had possession of Ceylon.'—Commander Taylor's *Sailing Directory* (London, 1874), p. 415.

Manás.—River of Assam, which takes its rise far up in the Bhután Hills, and flows south into the Brahmaputra. It is navigable up to the foot of the hills by native craft all the year round, and might be the smaller hills which surround it; Gangábárí or Gajboru (2220 feet), the highest peak of the Baghmúndí range, situated about 20 miles south-west of Puruliá; and Pánchkot or Pánchet (1600 feet), at the foot of which stands the old palace of the Rájás of Pánchet. These hills are all covered with dense jungle. The principal river of Mánbhúm is the Kasái (Cossye), which flows through the District from north-west to south-east, the total length of its course being about 171 miles. As it leaves Mánbhúm, it turns almost due south, and passes into Midnapur District. A considerable floating trade in timber, chiefly *sál*, is carried on during the rains between Ráipur, the southernmost *parganá* of Mánbhúm, and Midnapur. Just above Ráipur the Kasái forms rapids and several picturesque waterfalls of no great height. The Dámodar flows through Mánbhúm in an easterly direction with a slight inclination to the south. Its chief tributary, the Barákhar, has already been mentioned as forming part of the northern and north-eastern boundary of the District; and the Subarnarekhá, as dividing it on the west and south from Lohárdagá and Singhbhúm. The only other rivers of any importance are the Dhalkisor, which rises in the east of Mánbhúm, and after a short south-easterly course enters Bánkurá; and the Silái, also rising in the east of the District, and flowing south-east into Midnapur. The latter river is subject to destructive floods, and the village of Simlápál on its north bank is inundated almost every year.

The useful timber found in Mánbhúm is limited in quantity, forest covering but a small portion of the area; and it was reported in 1876 that at the rate at which *sál* was then being cut for railway sleepers, the supply could not last for many years. Although *sál* is the only timber cut for exportation, about 30 species of trees, yielding either ornamental or durable woods, occur in tolerable abundance.

The jungle products of Mánbhúm are the same as those of the adjoining District of HAZARIBAGH. Tigers, leopards, bears, wolves, and jackals are not uncommon, while various kinds of deer abound, and the bison is occasionally heard of in the south of the District. Elephants come every year from the south-east into the hilly country between Mánbhúm and Singhbhúm. The short-tailed *manis* (Manis crassicaudata *vel* pentadactyla), which, owing to its peculiar habits, is one of the least known quadrupeds in India, is occasionally found in the jungles bordering on Singhbhúm. This curious animal has been described by Lieutenant R. S. Tickell in the *Journal of the Asiatic Society* for 1842, and his account of it is quoted in the *Statistical Account of Bengal*, vol. xvii. pp. 266–268.

Administrative History.—The territory comprised in the present District of Mánbhúm was acquired by the British, with the grant of the *diwání* of Bengal, Behar, and Orissa, in 1765, and was occupied by us some time within the following five years. Up to 1805 the estates which now belong to Mánbhúm were attached, some to Bírbhúm, and some to Midnapur; but in that year they were formed, with a few others, into a separate District, called the Jungle Maháls. In 1833 that District was broken up, all the estates included in it, except Senpahári, Shergarh, and Bishnupur, being withdrawn from the regular system of administration, and placed under an officer called the Agent to the Governor-General for the South-West Frontier. These, with the estate of Dhalbhúm, detached at the same time from Midnapur, constituted the District of Mánbhúm. In 1846, owing to a press of criminal work, Dhalbhúm was transferred to Singhbhúm District; and in 1871, the boundaries of the District, as they at present exist, were finally rectified, and the civil, criminal, and revenue jurisdictions made conterminous. In 1854, the designation of the Province was changed from the South-West Frontier Agency to that of Chutiá Nágpur, and the title of the superintending officer from Governor-General's Agent to Commissioner.

Population.—In 1867, at the conclusion of the Revenue Survey of Mánbhúm, the population of the District was estimated at 694,498, the calculation being based on the ascertained number of houses, allowing an average of 4½ persons per house. In 1872, it was hoped that, as Mánbhúm contains a large proportion of Bengálís, and is more civilised than the other Districts of the Chutiá Nágpur Division, a simultaneous Census might be effected, as throughout Bengal generally. This, however, was found impracticable, and a gradual enumeration was made by a special salaried agency. The Census disclosed a population of 820,521, upon an area corresponding to that of the present District. At the last Census in 1881, taken simultaneously throughout the District on the night of the 17th February, the population of Mánbhúm District

was returned at 1,058,228, namely, males 525,328, and females 532,900. The total population thus disclosed shows an increase of 237,707, or 28·97 per cent., in nine years. This increase, however, is in a large degree more apparent than real, and it is computed that 15 per cent. of it is due to defective enumeration in 1872.

The results of the Census of 1881 may be briefly summarized as follows:—Area of the District, 4147 square miles, with 3 towns and 6144 villages, and 178,494 occupied houses. Total population, 1,058,228, namely, males 525,328, and females 532,900. Average density of population, 215·18 persons per square mile; villages per square mile, 1·48; persons per village, 472; houses per square mile, 43·87; inmates per house, 5·93. Mánbhúm is nearly twice as thickly populated as any other District of the Chutiá Nágpur Division, and its population is on the whole evenly distributed. Classified according to age, there are, under 15 years old, 233,977 boys and 222,467 girls; total children, 456,444, or 43·13 per cent. of the District population; above 15 years, males 291,351, and females 310,433; total adults, 601,784, or 56·87 per cent. of the population. The proportion of children, as usual in Districts in which the aboriginal element is strong, is abnormally large. The excessive proportion of male children is explained by the fact that here, as elsewhere in India, natives consider that girls attain womanhood at an earlier age than boys reach manhood, and many girls were thus entered as women.

Classified according to religion, there were in 1881—Hindus, 946,247, or 89·4 per cent. of the population; Muhammadans, 45,453, or 4·3 per cent.; Christians, 552; Buddhists, 23; Brahmos, 3; Jews, 2; and 'others,' nearly all professing aboriginal religions, 65,948, or 6·2 per cent. The most numerous aboriginal tribe is that of the Santáls, who number 129,103; namely, 86,403 returned as Hindus, and 42,700 as non-Hindus. Of Bhúmij Kols there are 97,695, of whom all but 489 are returned as Hindus. The Bhars and Rájbhars come next to the Kols, but are not returned separately in the Census Report. Other aboriginal tribes include Kharwárs 9017, and Gonds 1071. Amongst the semi-Hinduized aborigines, the Baurís number 69,207, the Bhúiyás 26,164, and Kochs 862, all professing Hindus. Including aborigines by race as well as by religion, the Census Report returns a total of 307,592 as representing the aboriginal population.

The Bhúmij Kols (numbers given in last paragraph) are the characteristic aboriginal race of Mánbhúm, as the Hos are of Singhbhúm, and the Mundas and Uráons of Lohárdagá. Colonel Dalton, in his *Ethnology of Bengal*, roughly describes them as being located in the country between the Kasái and Subarnarekhá rivers. They had once large settlements to the north of the former river, but they were dislodged by Aryans, who, as Hindus of the Kurmí caste, now occupy

their old village sites. The Bhúmij Kols of Western Mánbhúm are pure Mundas. They inhabit the tract of the country which lies on both sides of the Subarnarekhá river; bounded on the west by the edge of the Chutiá Nágpur plateau, on the east by the hill range of which Ajodhyá is the crowning peak, on the south by the Singhbhúm Hills, and on the north by the hills forming the boundary between Lohárdagá, Hazáribágh, and Mánbhúm Districts. This region contains an enormous number of Mundárí graveyards, and may fairly be considered one of the very earliest settlements of the Munda race. On the eastern side of the Ajodhyá range, which forms a complete barrier to ordinary communication, all is changed. Both the Mundárí language and the title of Munda have dropped out of use, and the aborigines of this tract have adopted Hindu customs, and are fast becoming Hindus.

The Bhúmij Kols of the Jungle Mahâls were once the terror of the surrounding Districts, disturbing the peace of the country by constant lawless outbreaks. It does not appear that on any occasion they rose simply to redress their own wrongs. It was sometimes in support of a turbulent chief, sometimes to oppose the Government in a policy which they did not approve, though they may have had very little personal interest in the matter. They are now a more peaceable tribe, though they have lost to a great extent the simplicity and truthfulness of character for which their cognates are generally distinguished. This degeneration is probably attributable to their connection with the Bengálí Hindus. An interesting account of the manners and customs of the tribe is contained in Colonel Dalton's *Ethnology of Bengal* (quoted in the *Statistical Account of Bengal*, vol. xvii. pp. 278–284), from which the above facts are taken. Some account of the Santáls will be found in the article on the SANTAL PARGANAS. There is a considerable emigration to the tea Districts of Cachar, Sylhet, and the Assam valley, as well as to the neighbouring District of Singhbhúm.

The Bráhmans of Mánbhúm number 49,190; Rájputs, 15,942; Baniyás, 26,836; and Káyasths, 6506. The number of Goálás, the chief pastoral caste, is 29,081; and amongst agricultural castes, the principal one is that of the Kurmís (of whom there are 168,385), the most numerous caste in the District. The other principal Hindu castes are the following:—Kumbhárs, 31,569; Lohárs, 26,915; Kalus, 24,164; Rájwars, 19,125; Doms, 18,943; Madaks, 18,450; Sunrís, 17,737; Nápits, 15,269; Tántís, 11,976; Harís, 11,371; Chamárs, 9439; Dhobís, 9048; Telís, 8218; Baruís, 7499; Kahárs, 6970; Bágdís, 6497; Kaibarttas, 5140; and Ghátwáls, 4449.

The Hindus, as roughly grouped together on the basis of religion, number 946,247, or 89·4 per cent. of the population, including persons in every grade of social position; the number is continually being increased by the gradual inclusion of semi-aboriginal tribes in the

general mass of Hindus. Muhammadans form 4·3 per cent. of the population, numbering 45,453. The Christian community number 552. Most of them are engaged in agriculture. A branch of the German Mission at Ránchí is at work in the District, with stations at Telkupí on the Dámodar, and at Matgudha.

Mánbhúm is a thoroughly rural District, and no towns in the proper sense of the word have yet developed. Two municipalities have a population of over 5000—namely, PURULIA and RAGHUNATHPUR, with an aggregate population of 15,420. Three other towns, Jhálidá, Kásípur, and Mánbázár, are estimated to contain more than 2000 inhabitants each. The 6147 towns and villages are classified as follows, according to the population. No less than 4448 contain less than two hundred inhabitants; 1373 from two hundred to five hundred; 269 from five hundred to a thousand; 45 from one to two thousand; 9 from two to three thousand; 1 from three to five thousand; and 2 from five to ten thousand inhabitants. The only objects of interest in the District are ruins of Jain temples near Puruliá, and at several points along the banks of the Kasái, Dámodar, and other rivers. The most noteworthy of these will be found mentioned in the articles on BUDHPUR, DALMI, and PALMA. At the foot of the Pánchkot Hill are the ruins of the ancient residence of the Pánchet Rájás. The remains are extensive, and some of the buildings appear to have been once double-storied. They are now embedded in dense jungle, though the place has not been deserted for more than a hundred years. Above the palaces, some 200 or 300 feet up the hillside, are the remains of two stone Hindu temples, well built and highly ornamented.

The Material Condition of the People.—The demand for labour consequent on the establishment of the railway, with the opening of the coal mines at Ránígani and the extended operations of the Public Works Department, has of late years ameliorated the condition of the people in the eastern parts of Mánbhúm District. The mass of the population are, of course, poor; but their wants being few, and supplied for the most part by the produce of their own fields, those who have a sufficient quantity of land are tolerably well off. There is, however, a large miscellaneous population, consisting of Baurís, Bhuiyás, Doms, and other semi-aboriginal tribes, who have little or no land, and find it hard to live when food is dear. The classes in this condition number about one-fourth of the entire population of the District.

As regards occupation, the Census divides the male population into—(1) Professional class, including all Government officials, 7532; (2) domestic class, 5656; (3) commercial class, 6085; (4) agricultural class, 210,062; (5) manufacturing and industrial class, 32,779; (6) indefinite, comprising general labourers and male children, 263,214.

Agriculture.—It has already been stated that the surface of the

District consists of a succession of rolling uplands, with intervening hollows, along which the drainage runs off to join the larger streams. The lower slopes of these uplands, and the swampy ground between, supply the only ground on which a wet rice crop can be grown. The system of rice cultivation, by terracing the sides of these slopes, has been described in the article on HAZARIBAGH DISTRICT.

Three principal crops of rice are grown—namely, *gorá dhán* (sown broadcast early in May on table-lands and on the tops of ridges), *nuán* (the autumn crop, sown in April and May, on the middle and higher levels of the terrace slopes, and reaped in the end of September or beginning of October), and *haimantik* or *áman* (the winter crop). The *áman* rice is the principal crop of the District, and is cultivated on the lowest levels of the terraced slopes, and on moist land lying beneath the embankments of tanks. It is sown in a nursery after the first showers of rain at the end of May and the beginning of June, and is subsequently planted out in the fields. The grain is harvested in December and January. Of these three rice crops, 44 principal varieties are named.

The other crops of Mánbhúm include wheat, barley, Indian corn, *arhar*, peas, beans, *tíl*, mustard, linseed, jute, hemp, sugar-cane, indigo (very little), *pán*, and tobacco. Tobacco is grown only on high land, and the entire area under this crop is roughly estimated at 265 acres. It is chiefly consumed locally, but a little is exported to Singhbhúm. Virginia tobacco has been recently introduced, and gives a yield double that obtained from the indigenous plant.

The rent for ordinary land is about 9s. an acre, and an average out-turn would be from 24 to 30 *maunds* of unhusked rice an acre. Superior land, renting at 18s. an acre, should yield from 48 to 60 *maunds*. Wages and prices have risen steadily of late years. Agricultural labourers, who formerly received 1½d. a day, now earn 3d., and the daily wages of a blacksmith have risen from 4½d. to 6d. Wages are, however, said to be, on the whole, lower than in any other part of Bengal. The price of rice in 1870 varied from 6s. a cwt. for the best husked quality, to 1s. 10d. per cwt. for common unhusked paddy. The average price of common rice in 1882 was returned at 30¾ *sers* per rupee, or 3s. 7½d. per cwt., and of wheat, 13 *sers* per rupee, or 8s. 7d. per cwt. Rotation of crops is practised to a limited extent, and manure is generally used throughout the District for all crops to which the cultivator can afford to apply it.

Natural Calamities.—Blights occur occasionally on a small scale; and in 1865 a flight of locusts passed over the District, without, however, doing serious damage to the harvest. Owing to the completeness of the natural drainage of the country, floods are unknown; but the same physical conformation which saves the District from floods, renders

it peculiarly liable to droughts caused by deficient rainfall. General droughts occurred in 1851 and 1865, the distress caused in the latter year being very severe. Partial droughts are common; and, to provide against them, the husbandmen resort to tanks and high-level reservoirs to irrigate their fields. The famine of 1866, following on the local drought of 1865, was felt with great severity in most parts of Mánbhúm, the distress being most intense in the *parganás* of Barábhúm, Mánbhúm, and Ráipur, in the south and south-east of the District. The highest price then reached for ordinary rice was £1, 11s. 3d. per cwt. When the price of ordinary rice rises to 11s. 2d., it may be assumed that famine is at hand. In ordinary years, the District grows more than sufficient grain to meet its local wants; but the means of communication are imperfect, and the south-western portion of Mánbhúm is in danger of isolation in time of scarcity.

Commerce, Trade, etc.—The trade of Mánbhúm is principally carried on by means of permanent markets, the chief of which are at Jhálidá, Puruliá, Mánbázár, Ichágarh, Raghunáthpur, Chás, Gobindpur, and Barábhúm. There are also periodical fairs, but these have declined in importance of late years, as everything in demand can now be bought at the permanent markets. The principal articles of export are oil-seeds, pulses, *ghí*, lac, indigo, *tasar* silk cocoons, timber, resin, coal, and (in good seasons) rice and paddy. The imports consist chiefly of salt, piece-goods, brass utensils, and unwrought iron. The weaving of cotton cloth in hand-looms is carried on all over the District as a domestic industry, and a little silk cloth is woven for export at Raghunáthpur, Singhbázár, and Gopináthpur. A fair quantity of *tasar* silk is annually produced in Mánbhúm; and there is no doubt that if the commercial demand for this article were to increase, the industry might be very largely developed. Coal is found at JHARIA, in the *parganá* of the same name. The field is situated a few miles south and south-east of Párasnáth Hill, and an account of it will be found in its proper alphabetical place. The total length of roads in Mánbhúm is returned at about 500 miles.

Administration.—The administrative history of Mánbhúm has been sketched in a previous section. Owing to the total loss of the District Records in the Mutiny, the details of revenue and expenditure for earlier years cannot now be ascertained. In 1860, the revenue of the District was £35,660, and the expenditure, £22,662. In 1870, the revenue had fallen to £30,493, and the expenditure to £18,888, the decrease in revenue being attributed partly to a difference in the system of accounts in the two years, and partly to a falling off in the excise returns, owing to the substitution of central distilleries for the out-still system. In 1882-83, the revenue of Mánbhúm District from the six main sources amounted to £29,366, made up as follows:—Land

revenue, £8201; excise, £7922; stamps, £9090; registration, £560; road cess, £2631; and municipal, £962. Total cost of police and officials, £13,524.

The land-tax does not yield so large a proportion of the revenue in Mánbhúm as in other Districts of Bengal. The Permanent Settlement was extended to the District at a time when it was unprepared for such a measure, and the assessment is disproportionately light. In 1870–71 there were 37 estates, held by 35 proprietors, paying a total land revenue of £9215, or an average payment of £249 from each estate and £263 from each individual proprietor. By 1883 the number of estates had decreased to 26, paying an average revenue to Government of £316. A peculiar feature in the land revenue administration of the District, is the standing order that landed property shall not be sold in satisfaction either of a private debt or a State demand without the sanction of the Commissioner of the Division. This restriction was originally imposed as a political measure. The old landed proprietors were extremely improvident, but possessed great feudal influence over their tenants, and it was feared that the transfer of ancient estates might lead to disaffection. When a landholder becomes so involved that his creditors are obliged to apply to Government for aid to recover their dues, the estate is attached by the authorities and managed as economically as possible by them, an allowance being made to the proprietor, and the surplus devoted to the liquidation of debts.

For police purposes, the District is divided into 10 *thánás* or police circles. In 1882, the Government and municipal police force numbered 319 men of all ranks, maintained at a total cost of £6204. There was also a rural police or village watch of 5556 men, costing in money or lands an estimated sum of £8499. The total machinery, therefore, for the protection of person and property consisted of 5875 officers and men, giving 1 man to every 0·7 square mile of the area or to every 180 of the population. The total cost was £15,703, or an average of £3, 15s. 9d. per square mile, and 3½d. per head. There is a principal jail at Puruliá, and a sub-divisional lock-up at Gobindpur.

The progress of education in Mánbhúm has, till within the last few years, been very slow. In 1860 there was only 1 Government school in the District; by 1870–71 the number of Government and aided schools had increased to 23, attended by 960 pupils. In 1872–73, owing to the creation of a number of primary schools under Sir G. Campbell's grant-in-aid scheme, the number of Government and aided schools was 183, and of pupils, 5271. In 1877 the number of such schools was 392, with 9616 pupils, or 9·65 pupils to every 1000 of the population. By 1883 there were in all 431 Government-inspected schools, including 3 girls' schools, with a total of 10,563 pupils. The Census Report of 1881 returned 10,176 boys and 208 girls as under

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instruction, besides 20,511 males and 390 females able to read and write but not under instruction. Of the boys of school-going age 1 in every 6·8 is at school. The District is divided for administrative purposes into 2 Sub-divisions, with their head-quarters at Puruliá and Gobindpur. The number of fiscal divisions (*parganás*) is 45.

Medical Aspects.—The climate of Mánbhúm is fairly healthy. The prevailing diseases are intermittent and remittent fevers, diarrhœa, and dysentery; cholera and small-pox frequently occur in an epidemic form. The temperature is thus returned:—in January 71° F., in April 101°, and in August 80°. Average annual rainfall, 49·7 inches; rainfall in 1883, 64·7 inches. [For further information regarding Mánbhúm, see *The Statistical Account of Bengal*, by W. W. Hunter, vol. xvii. pp. 253–374 (London, Trübner & Co., 1877). Also the *Bengal Census Report* for 1881, and the several Provincial and Departmental Reports from 1880 to 1884.]

Manchenhalli.—Village in Kolár District, Mysore State; on the right bank of the North Pinákini. Population (1881) 1708. The car festival of Venkataramana-swámi, held for two days at the full moon of the month of Phálgun (February—March), is annually attended by 2000 persons.

Manchhar.—Lake in Sehwán Sub-division, Karáchi (Kurrachee) District, Sind, Bombay Presidency; situated between 26° 22′ and 26° 28′ N. lat., and between 67° 37′ and 67° 47′ E. long. It is formed by the expansion of the Western Nára and the Aral streams. The first flows into it from the north, and the latter from the Indus westward at a distance of about 12 miles; but the supply from the Nára is trifling in quantity when compared with that from the Aral. It is, however, this latter stream which affords a means of discharge for the redundant waters of the lake. During the period of inundation, the Manchhar may be estimated at from 15 to 20 miles in length, with a breadth of about 10 miles; but when the water is low, this area is greatly contracted, and is then probably not more than 10 miles in diameter. The space left uncovered by the receding water is sown with grain, especially wheat, yielding magnificent crops.

Although shallow at the sides, the lake has a considerable depth of water in the middle; and so great is the quantity of fine fish that hundreds of men and boats are employed. The fish are taken chiefly by spearing, the great profusion of weed preventing the employment of nets. In the season when the lotus is in blossom, the lake presents a very beautiful appearance, as its surface, farther than the eye can reach, is covered with an unbroken succession of blossom and leaves. Within the last 14 or 15 years, the Indus, which formerly flowed close to the town of Sehwán, has left it 3 miles inland, and the Aral before reaching the Indus falls into a marsh, producing a bar of mud which prevents it

from acting as an efficient source of drainage to the lake. The consequence of this has been that from 4000 to 5000 acres of the best land in the lake are now (1876) never exposed, and cannot any longer be cultivated. The question of removing this bar has been under the consideration of the Public Works Department, and a steam dredge from England, which has not been lately used, did much towards enabling the Aral to again become an efficient drainer of the superabundant waters of the Manchhar Lake.

The fisheries of the lake yield an annual revenue of about £250, the rule being that one-third of the fish caught becomes the property of Government. The principal fish, in addition to the *pala*, which may be considered the finest in Sind, are—the *dambhro* (or *chelri*), a reddish-coloured fish, often attaining an enormous size, and ranking, according to native taste, next to the *pala* in excellence; the *moráko;* the *gandan*, a long, sharp, and very bony fish, of a silver colour, in length from 3 to 5 feet; the *shakúr*, the *murrel* of the Deccan; the *jerkho*, the largest fish in Sind; *goj* and *lor*, or eels; *khaggo*, or catfish; the *popri*, the *dohi*, the *theli; gangat*, or prawns; the *danur*, and the *singári*. A very interesting description of the methods of catching fish in the Manchhar, and of netting the wild-fowl which frequent the lake in myriads during the winter months, will be found in Mr. Hughes' *Gazetteer of Sind* (2nd edition, pp. 696 *sqq.*), from which work this article has been compiled.

Mandá.—Village in Rájsháhí District, Bengal; situated in lat. 24° 46′ 10″ N., and long. 88° 41′ 30″ E., on the west bank of the Atrái river. Seat of an annual fair in honour of Ráma (the seventh incarnation of Vishnu), on the occasion of the Hindu festival *Srí Nabami*, held in March or April. The fair is attended by about 15,000 people from all parts of the District.

Mandal.—Town in Ahmadábád District, Bombay Presidency; situated 15 miles north-west of the Viramgáum station on the Bombay, Baroda, and Central India Railway, in lat. 23° 17′ N., and long. 71° 58′ E. Population (1881) 6979. Post-office; school with 201 pupils in 1883–84.

Mandal.—Town in the Native State of Udaipur, Rájputána. Situated about 70 miles to the north-east of the capital, and the head-quarters of the Mandal *parganá*. It possesses a fine artificial lake, which irrigates a large extent of rice land. A column of victory, supposed to have been raised by Visáladeva or Bisáldeo of Ajmere, in memory of a victory over the Gehlots, is said to have formerly stood on an island in the lake.

Mandalay.—Capital of Upper Burma; situated in lat. 21° 59′ 4″ N., and long. 96° 8′ E., about 2 miles from the left bank of the Irawadi (Irrawaddy), in a level plain at the foot of an isolated hill 600 feet in height, from which the city takes its name. The father of the recently

deposed King Thebau transferred the seat of Government to Mandalay from the neighbouring city of Amarapura in 1860. From that year until the 1st January 1886, Mandalay formed the capital of Independent Burma, and lay beyond the scope of this work. The following article had been kindly supplied by General Fytche, C.S.I., late Chief Commissioner of British Burma. While it was passing through the press, the conquest of Upper Burma by General Prendergast's force, and the annexation of the country to the British Empire, took place. But the few weeks which have elapsed since the annexation (1st January 1886) and the date when this article had to be printed off, render it impossible to add substantially to the materials supplied by General Fytche.

The city proper is laid out in a square, each side of which is a little over a mile in length. It is enclosed by a brick wall 26 feet high and 3 feet thick, crenelated at the top. In the rear of the wall is an earthen parapet 30 feet thick at its base, rising to a banquette 6 feet broad, and reaching within 4 feet of the upper surface of the wall, so as to allow of fire being opened through the indentations. The flanking defences are provided for by slightly projecting turrets placed 200 feet apart. At the four angles, two of these meet together and form one large bastion. The wall is pierced with 12 gates, 3 on each side, covered by masonry barbicans or traverses. The gateways are not arched over, but are surmounted, as also the turrets and bastions, with wooden pavilions or watch-towers having double and triple roofs. A deep moat, 100 feet broad, with its escarp 60 feet from the walls, extends along all four sides, and is always kept full of water. It is crossed by five bridges, two on the west or river face, and one on each of the other three sides. No provision has been made for the defence of these bridges, except that afforded from the walls; but being framed of timber, they could easily be removed or destroyed on the approach of an enemy. There is no glacis or any other advanced work beyond the moat.

The palace of the king occupies the central space in the city; the walls of its enclosure are laid symmetrically with those of the city, and each face is about 370 yards in length. The outermost enclosure consists of a stockade of teak-wood posts 20 feet high, and within it are three successive enclosures, bounded by brick walls. The main entrance to the palace is in the centre of the eastern face. The palace is built within the inner enclosure; and its front, which faces the east, contains the Great Hall of Audience, 260 feet long, composed of teak timber, elaborately carved and gilded, erected on a terrace of brickwork 10 feet high. It is in the form of a colonnade, the central part running back, forming a nave with two side aisles. At the extremity of this nave is a space like a chancel (said to be the exact centre of the city), where

stands the throne, over which a grand *shwé-pya-that* or gilded spire rises in light, graceful diminishing stages, visible from all parts of the city and surrounding country. Behind this hall is the *Byé-doik* or Privy Council Chamber, and other offices; and to the westward are the private apartments and the pleasure-grounds.

In the same enclosure also stand the treasury, arsenal, powder magazine, mint, stables of the white elephant, and the lofty campanile, where the water-clock is placed, which gives the time to the palace and the city. In the other two enclosures stand the *Hlaut-dau* or Hall of the Supreme Council, the *Yún-dau* or High Court, and barracks and guard-houses for the troops. Around the palace walls a wide space has been laid out as an esplanade, on the farther margin of which are situated most of the houses of the princes, ministers of State, and court officials. These are extensive timber structures, with panelled wooden walls, or of bamboo-mat panels framed in teak-wood. The roofs are single, double, and triple, with carved eaves and gable-ends. The character of the house, and especially of the roof, is a matter of regulation depending upon the rank of the occupant.

The city of Mandalay may be said to consist of two parts, mural and extra-mural; the streets in the former run parallel with the walls, dividing the building sites into rectangular blocks. The great majority of the houses, both within and without the walls, are constructed of bamboos and bamboo-matting, slightly raised from the ground on posts; here and there brick and wooden buildings, generally the property of Mughal and Chinese settlers, are to be found. The streets inside the city are very wide, the principal ones being lined with tamarind trees. At a distance of a few feet from the house-fronts run enclosures of bamboo lattice-work, which are whitewashed, and often gracefully festooned with creepers and flowering shrubs. In the suburbs, the roads are laid out with something of the same regularity as in the city, but of less width, with the exception of the principal road, the *Kulahdan* or foreign quarter, inhabited chiefly by Armenians, Mughals, and the few European residents. The number of houses in the city and suburbs is said to be, in round numbers, 12,000; and the population is roughly estimated at 65,000. Monasteries and pagodas are dotted about in open spaces both within and without the walls. The former are of the same style of architecture as the houses of the princes and chief nobles, but frequently are even more elaborately carved and gilded. The normal shape of the Burmese *tsé-dí* or pagoda is that of a cone or circular pyramid of solid brickwork, supported on a square base, and crowned by a tapering spire of gilt ironwork, formed in three crowns, called a *htí*, and typical of the Buddhist triad.

Trade and Manufactures.—The great highways by which trade is conducted between Mandalay and the British possessions are the rivers

Irawadi (Irrawaddy) and Sittang (Tsit-taung). The entire value of the river traffic, as recorded at the British frontier custom-houses of Thayet-myo and Taung-ngú in the year 1876–77 amounted to £3,070,465—namely, imports, £1,589,762, and exports, £1,480,703. The tonnage then employed in carrying this trade consisted of 11 steamers of the Irawadi Flotilla Company, 4 belonging to the King of Burma, and 20,161 native boats. The capacity of the latter amounted to 201,986 tons. In 1882–83, the value of the river traffic on the Irawadi and Sittang amounted to £3,106,853—namely, imports, £1,557,584, and exports, £1,549,270. Besides this river trade, a considerable traffic is carried on by numerous land routes, on which a systematic attempt to supervise and collect statistics is now being carried out. The value of the land traffic by way of Thayet-myo and Taung-ngú in 1882–83 was £207,919—namely, imports, £152,428; exports, £55,491. The principal imports consist of rice, piece-goods, cotton twist and yarn, raw silk, areca-nut, *nga-pí* and dried fish, salt, and crockery; the principal exports are raw cotton, teak timber, petroleum, cutch, jaggery and molasses, hides, horns, ivory, stick-lac, wheat and pulse, tobacco, dyes, and pickled tea. The recent annexation of Upper Burma to the British Empire will probably lead to a great development of the trade of Mandalay.

The overland traffic with China is an interesting branch of Burmese trade. The exports include raw cotton (the chief staple), British manufactures, salt, edible birds'-nests and fish maws, jade stone, amber and rubies; and the imports—silk, gold-leaf, copper, quicksilver, vermilion, velvet, drugs, tea, fresh and dried fruits. No trustworthy statistics have ever been obtained of the value of this trade, and it has been variously estimated at from £500,000 to £800,000. The export of silk from Mandalay into British Burma is decreasing, owing to the competition of European manufactures; value of the export in 1882–83, £63,338.

A number of *bázárs* or markets are scattered throughout the city and suburbs, and well supply the wants of the people. Artisans and traders in the same article cluster together in groups and give their names to wards, but are not strictly confined to one locality as is the case in most eastern cities.

The principal manufacture is weaving in silk. Manchester imports are gradually displacing home-made cloth; but the native silk manufacture, notwithstanding its patterns having been imitated to suit Burmese taste, still holds its own, and is infinitely preferred for strength of fabric and the permanence and beauty of its dyes. The *repoussé* gold and silver work is very beautiful and finished in execution; and the ivory and wood carvings, in clear and bold *alto-relievo*, are artistic in composition and design. The Burmese have a great love for bells and gongs, and are very expert in casting them. Some rude cutlery

and *dhas*, or native swords, are made. King Thebau's father established a gun manufactory, but the guns cast are of a very inferior description.

Administration.—King Thebau succeeded his father on the throne in October 1878, being the eleventh in succession from Alompra, the founder of the dynasty. The Burmese kings claimed to be descended from an old Aryan clan—the tribe of the Sakyas—the family to which Gautama, the last Buddha, belonged; and the earliest date in Burmese history, or rather in the story which the Burmese mix up with their own, appears to be 691 B.C., the grand epoch fixed by Arjuna, King of Kapilavasta. The assumption of this ancient pedigree by the royal family was, however, entirely without foundation. They are descended from the hunter Alompra, who usurped the throne only a little more than a century ago. Their administration was absolute despotism. The king was under no restraint whatever, saving his voluntary respect for Buddhist rules and precepts; otherwise he was lord and master of the life and property of every one of his subjects. There was no hereditary rank in the kingdom, and the so-called nobles were only officials appointed or dismissed at will. King Thebau commenced his rule by remitting several royal monopolies and vexatious taxes which tended to paralyze commerce, and by promises of a more liberal form of government than had hitherto existed. But his palace massacres, the commotions of his court, his persistent ill-treatment of British subjects, and his intrigues with foreign powers, form the practical events of his reign. His despotism and removal to India, and the annexation of his territories to the British Empire on the 1st January 1886, can be but barely referred to here.

Medical Aspects.—The general sturdy and vigorous appearance of the Burmese is a good criterion of the healthiness of the climate. The greatest heat is felt in April and May, before the setting in of the periodical rains, when the thermometer rises occasionally as high as 95° F. The transitions of the seasons are sudden, and earthquakes are not infrequent, and often usher in and conclude the wet season. The most prevalent complaints are fever, dysentery, and hepatic diseases.

Mandalgarh.—Fort in the Native State of Udaipur, Rájputána; situated about 96 miles to the north-east of Udaipur city, and about the same distance south by east from Ajmere. It extends to the length of half a mile, with a low rampart wall and bastions encircling the crest of the hill on which it stands. It originally belonged to the Balnot Rájputs, a branch of the Solankís, but was granted in 1699 by the Emperor Aurangzeb to a Rahtor chief of Pisangan, who was again expelled by the Rána of Udaipur.

Mandapeta (*Mundapett*).—Town in Rámachandrapuram *táluk*, Godávari District, Madras Presidency. Lat. 16° 50′ N., long. 81° 58′ E.

Population (1881) 5914; number of houses, 1244. Hindus numbered 5865, and Muhammadans 49. Situated 1 mile south of the Mandapetta Canal, which connects the Coconada and Coringa Canals. The canal derives its name from the town.

Mandar (*Mandargiri*).—Hill in Bhágalpur District, Bengal. Lat. 24° 50′ 25″ N., long. 87° 4′ 41″ E.; upwards of 700 feet in height; situated about 30 miles south of the town of Bhágalpur. This mountain, which possesses great sanctity in Hindu mythology, consists of a huge mass of granite, overgrown near its summit with low jungle. Numerous small artificial tanks have been cut in the sides of the solid rock; and the figure of a huge serpent, carved in relief on its surface, has been made to coil around it. For about two-thirds of its height, the hill can be ascended by steps hewn in the rock. Mandar hill is first mentioned in the account of the Great Deluge, when Vishnu floated on the waters in a profound slumber. Besides being a place of pilgrimage, this spot abounds in interesting ruins and natural curiosities of interest to the antiquary. For details, see *Statistical Account of Bengal*, vol. xiv. pp. 95–102.

Mándárípur.—Sub-division and town in Farídpur District, Bengal. —*See* MADARIPUR.

Mandasa (*Pathapatanam*).—Town in Ganjám District, Madras Presidency. Population (1881) 4671. Situated two miles west of Haripuram, a village on the high road from Madras to Calcutta. Mandasa is the chief town of Mandasa *zámindárí*.

Mandáwar.—Ancient town in Bijnaur *tahsíl*, Bijnaur (Bijnor) District, North-Western Provinces. Lat. 29° 28′ 50″ N., long. 78° 10′ 25″ E.; situated near the right bank of the Málin river, 8 miles north of Bijnaur town. Mandáwar dates back to a remote antiquity, and it has been suggested that its population may have been the Mathæ mentioned by the Greek ambassador Megasthenes, *circ.* 300 B.C. It has also been identified with the Madipur (*Mo-ti-pu-lo*) of Hiuen Tsiang, the Chinese pilgrim of the 7th century A.D. He describes Madipur as the capital of a separate kingdom nearly 1000 miles (6000 *li*) in circumference, ruled over by a Hindu Sudra king, but with about half the population professing Buddhism. Madipur appears to have been a stronghold of the faith, for it could boast of ten Buddhist monasteries containing 800 monks. Mandáwar next emerges into history as a heap of ruins in the forest. About 1114, some enterprising Agarwála Baniyás from Meerut District crossed the Ganges into Bijnaur, and repeopled the site. Their descendants still flourish in Mandáwar *parganá* and town. At the time of the second invasion of Shaháb-ud-dín (Muhammad of Ghor) in 1193, Mandáwar was included within the dominions of the Hindu king Prithwi Ráj, and shared in the overthrow of that monarch. In the reign of Akbar, the town had become, as

now, the capital of a *parganá*. In 1805 it was sacked by the Pindárí freebooter, Amír Khán, and during the Mutiny of 1857 suffered from the attacks of Ját marauders.

The more ancient part of the site of the ruined city consists of a mound about half a mile square, raised some 10 feet above the rest of the town, which flanks it on its western and northern sides. In its midst is a ruined fort, and in its south-eastern corner stands the principal mosque (*Jama Masjid*), said to have been built on the site, and out of the materials, of an older Hindu temple. The town has no modern edifice of any interest or beauty, being built chiefly of mud, with two or three substantial brick-built houses, in one of which lives the descendant of the ancient Baniyá family, mentioned above as having settled here in the 12th century. Population (1872) 7622; (1881) 7125, namely, Muhammadans, 4329; Hindus, 2786; and Christians, 10. For police and conservancy purposes a small house-tax is levied, and the inhabitants are said to pay more attention to sanitary matters than those of most other towns in the District. Markets are held twice a week, and a small manufacture is carried on of *papier-mache* boxes, trays, and paper knives. The only public buildings are a police station and post-office.

Mandesar.—Town in Gwalior State, Central India.—*See* MANDSAUR.

Mándgáon.—Town in Hinganghát *tahsíl*, Wardhá District, Central Provinces, near the river Waná; 19 miles south-west-west of Wardhá town. Population (1881) 3199, namely, Hindus, 2921; Muhammadans, 127; Jains, 42; and aboriginal tribes, 109. Mándgáon has a town schoolhouse; and at the market, held every Tuesday, a good trade in cattle takes place.

Mandháta.—Island in the Narbadá (Nerbudda) river, attached to Nimár District, Central Provinces; famous for its numerous temples, including the great shrine of Omkár, a form of Siva. The word is derived from the mystic syllable 'Om,' which is employed in the beginning of all prayers, and comprehends all the gods, the Vedas, and the three spheres of the world. According to the *Narmadá Khand*, which professes to be a portion of the *Skanda Purána*, the island was originally called Baidúrya Mani Parvat; but its name was changed to Mandháta as a boon from Omkár to the Rájá Mándhátrí, seventeenth of the Solar race, who performed a great sacrifice to the god.

The island covers an area of about five-sixths of a square mile; and a deep ravine runs through it from north to south. Towards the north, the ground slopes gently to the water; but the southern and eastern faces terminate in bluff precipices, 400 or 500 feet high. At this point, the southern bank of the Narbadá is equally steep;

and between the cliffs the river forms an exceedingly deep and silent pool, full of crocodiles and large fish, many of which are so tame as to take grain off the lower steps of the sacred *ghâts*. The northern branch of the Narbadá is styled the Káverí; and the belief is that a stream of that name, which enters the Narbadá about a mile higher up, passes unmixed through its waters, and again leaves it at Mandháta, thus making at this favoured spot a double *sangam* or junction of two holy rivers. On both sides of the Narbadá, the rocks are of a greenish hue, very boldly stratified, and probably of hornstone slate.

Mandháta was a seat of Siva-worship at an early age. The shrine of Omkár in the island, and the shrine of Amreswar (Lord of the Immortals) on the southern bank of the river, are two of the twelve great Lingas which existed in India when Mahmúd of Ghazní demolished the temple of Somnáth in 1024 A.D. The Bráhmans who now officiate at the shrine, however, wish to exclude Omkár from the twelve Lingas styled *A'di* or first, and the *Narmadá Khand* supports their view. The *Kási Khand* and other Sivaite writings are against them; and pilgrims who have vowed to visit the Bára Jyotí Lingas, offer their adorations both to Omkár and Amareswar. Regarding the latter, however, they are avowedly left by the Bráhmans under a pious mistake. During the wars of the 17th and 18th centuries, the south banks were deserted and overgrown by jungle; and when, towards the end of the 18th century, the Peshwá desired to rebuild the temple, neither the Linga nor its temple could be found. A new temple was, however, built, together with a group of smaller ones. Some time afterwards, the old Linga was accidentally discovered, standing on four *arghás*, one above the other, which show that it had existed through the four ages of the world. Moreover, the Benares *pandits* recognised it as the true Linga, since it was situated in a line with Omkár and the Kapila Sangam, where a small stream joins the Narbadá. Ráo Daulat Singh, the late Rájá of Mandháta, built a temple over it; but its honours, and even its name, had been appropriated by its younger rival, and it is now known as the Viswa Náth.

The Rájá of Mandháta, who is hereditary custodian of all the modern temples, is a Bhitála, claiming to be twenty-eighth in descent from a Chauhán Rájput named Bhárat Singh, who took Mandháta from Nathú Bhíl in 1165. Probably he only married the daughter of the Bhíl chief, as Nathú's descendants are still the hereditary custodians of the ancient temples on the top and north side of the hill. At that time, a Gosáin, named Daryáo Náth, was the only worshipper of Omkár on the island, which pilgrims could not visit for fear of a terrible god called Kál Bhairava, and his consort Kálí Deví, who fed on human flesh. At last, Daryáo Náth, by his austerities, shut up Kálí

Deví in a cave, the mouth of which may yet be seen, appeasing her by erecting an image outside to receive worship; while he arranged that Kál Bhairava should in future receive human sacrifices at regular intervals. From that time, devotees have dashed themselves over the Bírkhala cliffs, at the eastern end of the island, on to the rocks by the river brink, where the terrible god resided; till, in 1824, the British officer in charge of Nimár witnessed the last such offering to Kál Bhairava. The disciples of Daryáo Náth still enjoy lands on account of the worship of Omkár.

The old temples about Mandháta have suffered greatly from the iconoclastic zeal of the Muhammadans, who ruled the country from about 1400. Every dome has been overthrown, every figure mutilated. The walls of the four forts are formed of uncemented blocks of stone, partly the basalt of the hill itself, and partly a yellow sandstone, which must have been brought from a considerable distance. Fine carvings and statues of gods ornament the horizontal gateways. The oldest of the Sivaite temples is probably that on the Bírkhala rocks. Unlike the other temples, which present the ordinary shrine and porch, it consists of a courtyard, with a verandah and colonnades supported on massive pillars, boldly carved in rectilineal figures.

On the hill stand the ruins of a very fine temple, now called Sidheswar Mahádeva. To each of the four sides of the shrine was added a projection containing a doorway; and before every doorway was a porch resting on fourteen pillars, elaborately carved, and about 14 feet high. The whole building stood upon a plinth or platform, rising about 10 feet from the ground, and projecting 10 or 12 feet beyond the porches, before each of which was a flight of ten steps. A frieze of elephants nearly 5 feet high, and carved in relief with singular correctness on slabs of yellow sandstone, was continued round the plinth. Only two of the elephants, however, remain in any perfection. Of another and probably older temple, on the north bank of the island, only the porch remains. The temple of Gaurí Somnáth appears to be an old shrine rebuilt with lime. Somnáth himself is a gigantic *linga*, now black, but once white, as his name denotes. The Muhammadan leader who destroyed old Mandháta, was told that this *linga* had the property of revealing to the inquirer the object into which his soul would pass at his next metempsychosis. He questioned it as to his own fate; when, mirrored upon the *linga*, the soldier of Islám beheld a pig. In his wrath he cast the *linga* into the fire, and since then it has assumed its jet-black hue. An immense Nandi (Siva's bull), of a fine green stone, lies headless in front of the shrine, and about 100 yards farther on is an overthrown pillar nearly 20 feet in length.

On the island itself, every temple is dedicated to Siva or his asso-

ciate deities; but the north bank of the river opposite, in addition to Sivaite ruins, contains several old structures devoted to Vishnu, and a whole group of Jain temples. Where the Narbadá bifurcates are the remains of some gateways, and a large shapeless building containing twenty-four figures of Vishnu and his various *avatárs*, carved in good style in a close-grained green stone. Among them is a large *varáha* or boar *avatár*, covered with the same panoply of sitting figures as that at Khandwá. The date 1346 A.D. appears on an image of Siva in the same building. Farther down the bank, in a small ravine called the Ráwana *nálá*, is found a prostrate figure 18½ feet in length, rudely carved in bold relief on four basalt slabs laid end to end. It has ten arms, all holding clubs and pendent skulls, but only one head. On its chest is a scorpion, and at its right side a rat, while one foot rests on a smaller prostrate human figure. The people call it Rávana, the demon king of Ceylon, who carried off Sítá, the wife of Ráma; but probably it represents the consort of Siva in her more terrible form of Mahákálí. It was evidently intended to be placed in a colossal temple which was never completed. The bed of the ravine is covered with huge basalt blocks, slightly carved in some places, which doubtless had the same destination. Numbers of these stones have been removed to build the modern town of Mandháta, and the dry bed of the Narbadá has been strewn with them in the transit.

The Jain temples stand on an elevation overlooking, but a little retired from, the river. The largest building, raised on a plinth of basalt blocks 5 feet high, was perhaps a monastery. It consisted of a quadrangle 53 feet by 43 feet, surrounded by four rows of pillars about 10 feet high. The eastern wall is still complete, decorated with geometrical figures rudely carved in yellow sandstone. The building was apparently devoid of external ornament. On each side of the doorway is a figure carved on slabs about 2 feet high, with Sivaite and Jain emblems curiously intermixed. To the north stood the temple proper, built in a pyramidal shape, with numerous smaller spires. The porch is still erect, but the shrine has been buried beneath the ruins of the dome. The third building was a smaller temple, 19 feet square, raised on a pyramid of basalt blocks about 25 feet high. The sitting figures over its doorways and the other carvings resemble those in the two larger buildings.

The hills near these temples, as well as the island of Mandháta itself, are covered with remains of habitations; but nowhere is there a trace of lime in the building. Probably this region was once thickly populated; at present only the Rájá's people and the temple officials occupy it. The great fair of Omkárjí, held on the 15th of Kártik (end of October), is attended by about 15,000 persons; and a good bridle-road of about 7 miles makes the place easily accessible from the Barwái

travellers' bungalow. There is also a good road of about 7 miles from the Mortakka station on the Rájputána-Málwá Railway. The southern bank has, during the present century, become the site of numerous temples and monasteries of Godar (whence its name of Godarpura) and other devotees, raised by the piety of various Maráthá chiefs. The *Bhavishya Purána* contains a prophecy that, after 5000 years of the Kálíyuga, the sanctity of the Gangá river will expire, and the Narbadá will be left without a rival. The Mandháta Bráhmans anxiously expect this important event, which a few years will now determine.

during the night, and declines again towards morning, when the amount of water in its bed is perhaps one-third less than at midnight.' Population (1881) 5030, namely, Hindus, 4807; Muhammadans, 202; Sikhs, 14; and Christians, 7. Elevation of Mandi above the sea, 2557 feet.

Mandiáon.—Town in Lucknow District, Oudh; situated a short distance north of Lucknow city, on the road to Sítápur. The site of the old Lucknow cantonments previous to the outbreak of the Mutiny in 1857, built by Saádat Alí Khán, 6th Nawáb of Oudh, in whose time three regiments of the Company's troops were stationed here. The buildings have now disappeared, with the exception of a gateway or two, and the gable end of the church, which stands out among the growing crops. Mandiáon is at present a place of no importance. Population (1881), Hindus, 1856; Muhammadans, 444; total, 2300, residing in 445 houses, mostly of mud. The town is said to derive its name from an ancient Hindu hermit, Mandal Rikh, who here performed his solitary devotions in the midst of a large forest. The Bhars afterwards effected a settlement, but were eventually driven out by Málik Adam, one of Sayyid Sálár's lieutenants, in whose honour an annual festival is held. A colony of Shaikhs, the relic of the invasion, is said to have held the village for 150 years, when they were exterminated by Rájá Singh, one of the Rakselá Chauháns of Bhaulí. This leader conferred the lands half on Bráhmans and half on Káyasths, servants of his own; whose descendants hold shares in the village at the present day.

Mandlá.—British District in the Jabalpur Division of the Chief Commissionership of the Central Provinces, lying between 22° 14′ and 23° 22′ N. lat., and between 80° and 81° 48′ E. long. Bounded on the north-east by the State of Rewá; on the south-east by Biláspur District; on the south-west by Bálághát District; and on the west by Seoní and Jabalpur Districts. Area, 4719 square miles; population in 1881, 301,760 persons. The administrative head-quarters of the District are at the town of MANDLA.

Physical Aspects.—Mandlá consists of a wild highland region, broken up by the valleys of numerous rivers. The traveller makes his way across a succession of inhospitable plateaux, along narrow footpaths,

power of the Katoch Rájá, of the Gúrkhas, and finally of Ranjít Singh of Lahore. Tribute was regularly paid to Lahore, until 1840, when hills seem to open out into a rolling prairie, diversified here and there with belts of forest, or perhaps a patch of cultivated ground intersected by a river, with a fringe of green trees on its banks. Trap covers the whole of the area, except in the south-west, where a formation of crystalline rocks occupies a small tract. To the south-east, though granite, syenite, and limestone frequently appear on the banks of streams, and form the sides of hills, yet almost everywhere, even to the tops of the highest peaks, trap is the uppermost rock. In the low-lands there is abundance of rich black cotton-soil; patches of which are surrounded, as the land rises towards the hills, with a red gravelly earth, usually covered with masses of stones and flints. In the less favoured valleys, a light friable sandy soil is found, which bears the name of *sehar*.

The Narbadá (Nerbudda) river, after forming for some distance the boundary between Mandlá and Rewá, bends to the west, and flows through the centre of the District. At the beginning of its course it receives the waters of many tributaries, which take their rise in the Máikal heights, and flow northward along valleys hemmed in by low spurs of hills jutting out from the main range, and chiefly covered with *sál* forests. Many of these rivers never run dry; and, with the natural springs which abound, they afford an ample supply of water to the eastern portion of the District. As the Narbadá rolls on towards the west, its waters are increased by those of the Banjár, the Hálon, and numerous other streams. Most of these rivers flow at a great depth below the general level, and can rarely be utilized for irrigation. In their valleys to the east and south of the town of Mandlá, all the best cultivation of the District is comprised. The richest are the Harwelí lands, formed by irregular spurs, projecting northward from the Bhainsá Ghát towards the Narbadá, and watered by the Banjár, an affluent of the Narbadá, and by the Thánwar, which falls into the Waingangá. Between these streams stretches a range of low hills, crowned by an extensive plateau, where some of the best Gond villages lie, each within its fringe of jungle. To the west of Mandlá town, the country becomes still more wild and difficult; though at places it opens into valleys, down which, after the rains, the mountain torrents force their way to the Narbadá. The spurs and ridges which occupy the greater part of the District, for the most part have the same character. An abrupt ascent leads to a fine plateau, with a general slope to the east.

The Máikal range, almost entirely of laterite formation, and densely clothed with *sál* forests, forms part of the great watershed between Eastern and Western India. Its wildest section is in Sháhpur, north of the Narbadá, where the hills reach to a great height, rising pre-

cipitously from the valley of the Johilá, which flows in a deep bed below. From these heights the Ganjár and the Ganjári descend by a series of falls from one plateau to another, till they mingle with the Johilá. The highest cascade is about 60 feet; and behind it are some vast caverns of unknown extent, which are carefully avoided by the Gonds who dwell amid the jungle, as being the homes, not only of wild beasts, but of evil spirits, who have tenanted them ever since the time of the Pándavas. All these hills are deemed to be under the special protection of Mahádeva, or Siva. The loftiest mountain of the Máikal range is Chauriádádar, which is computed to be 3400 feet above sea-level. On its summit an open plateau extends for 6 square miles, so abundantly supplied with water, and so well adapted to catch every cooling breeze, that, were it not for its inaccessibility, it would be admirably suited for a sanitarium. Amid the wild and desolate country which covers so large a part of the District, tigers and other wild beasts abound; and though their ravages have been exaggerated, the proportion of deaths from wild beasts is considerably greater in Mandlá than in any other District of the Central Provinces.

History.—The names of the dynasty under which Mandlá became known as the chief seat of the Gond kingdom, were found engraved in Sanskrit on a stone in the temple at Rámnagar. The list begins with Jádhava Ráya, who, influenced by a dream and the advice of a holy Bráhman, entered the service of the Gond Rájá Nágdeva. Nágdeva gave him his only child in marriage, and, in obedience to a sign from heaven, named his son-in-law as his successor. On ascending the throne, the Rájput Jadhava Ráya made the Bráhman, Sarbhí Páthak, his prime minister; and while the descendants of the one reigned from 358 A.D. down to the Maráthá conquest in 1781, the descendants of the other discharged the duties of prime minister for the same long period. It was not, however, till 634 that Mandlá itself was added to the dominions of the Gondwáná princes by Gopál Sá, tenth of his line. After his reign, the whole kingdom became known as Garhá Mandlá. From Gopál Sá a succession of 38 princes brings us down to Sangrám Sá, under whom the Garhá-Mandlá dynasty attained its maximum of power. Before his death in 1530, he had made himself master of 52 *garhs* or provinces, comprising the present Districts of Mandlá, Jabalpur (Jubbulpore), Damoh, Ságar (Saugor), Narsinghpur, Seoní, and part of Hoshangábád, together with the principality of Bhopál.

In 1564, Asaf Khán, the Mughal viceroy at Kara Mánikpur on the Ganges, invaded the Gondwáná kingdom at the head of a considerable force. At that time the country was under the regency of the widow of Dalpat Sá, the beneficent Rání Durgávatí, whose name yet

lives in the grateful recollection of the people. After sustaining a defeat near Singaurgarh, in Jabalpur District, she retired upon Garhá, and finally upon Mandlá, where she took up a strong position in a narrow defile. The first day the queen was victorious; but the next day Asaf Khán brought up his artillery, and renewed the battle. The queen, though severely wounded, still defended the pass in person, when suddenly the river in her rear, which before the action was nearly dry, began to rise. The Gondwáná troops, finding their retreat cut off, gave way in confusion. Then Rání Durgávatí snatched a dagger from her elephant-driver, and plunged it into her bosom, thus crowning a useful life with a heroic death. By this victory, Asaf Khán acquired immense booty, including a thousand elephants. Soon after his departure, the kingdom suffered its first diminution in the loss of ten provinces, afterwards formed into the State of Bhopál, which were ceded to the Emperor Akbar, to obtain his recognition of the succession of Chandra Sá.

From this time, the Garhá-Mandlá princes admitted the supremacy of the imperial power. The Bundelá invasion, two generations later, and the contests and foreign interventions caused by a series of disputed successions, gradually stripped the Gondwáná kingdom of territory, so that when Maháráj Sá succeeded in 1731, only 29 of the 42 provinces remained. Mandlá itself, however, had progressed during this period, especially in the reign of Hírde Sá, under whom large numbers of Lodhís settled in the District; and much of its land was brought under cultivation. In 1742, the Peshwá invaded the country, and, after defeating and killing Maháráj Sá, placed the dead king's son, Seo Ráj Sá, on the throne, on condition of paying *chauth* or tribute of one-fourth, estimated at 4 *lákhs* of rupees (say £40,000). This invasion laid waste the whole country east of Jabalpur, and Mandlá has never recovered from its effects. Further cessions of territory to the Rájá of Nágpur and to the Peshwá followed; until the Gond kingdom lay at the mercy of the Maráthá rulers of Ságar, who represented the Peshwá's authority.

At length, in 1781, the last of a line which had ruled for over fourteen centuries was deposed, and his territories added to the Ságar principality. The country was ruled from Ságar for 18 years, but only one of the Ságar chiefs, Vásudeva Pandit, has left any mark on the District. He is said to have done more in a few months towards the ruin of Mandlá than internal dissensions or Pindárí raids could have effected in as many years. In 1799, Mandlá was annexed by the Bhonsla Rájás of Nágpur; and during the following years the town of Mandlá was fortified against the Pindárís, who never succeeded in taking it, though they freely pillaged the rest of the country.

In 1818, on the conclusion of the third and last Maráthá war,

Mandlá was transferred to the British. The Maráthá garrison in the fort, however, refused to surrender; and it was necessary for General Marshall to take the place by assault on the 24th March 1818. A severe famine marked the first year of British rule, together with the first outbreak of cholera ever known in the country. At the time of the Sepoy Mutiny in 1857, the chiefs of Rámgarh, Sháhpur, and Sohágpur rebelled. When order was restored, Sohágpur was made over to the Rájá of Rewá, and the estates of Rámgarh and Sháhpur were confiscated. Some further attempts at insurrection in 1858 were easily suppressed, and the British administration has ever since been firmly established in Mandlá.

Population.—A rough enumeration in 1866 returned the population of Mandlá District at 202,549. The Census of 1872 disclosed 213,018. The latest enumeration in 1881 returned the population at 301,760, showing an increase of 88,742, or 41·66 per cent., since 1872. This increase is, however, to a large extent only apparent, and arises from defective enumeration at the time of the previous Census. The Deputy-Commissioner accounts for 40,000 of the increase, or about 13 per cent. of the population in 1882, as owing to omissions in 1872. There has, however, been an extensive immigration into Mandlá from Rewá State since 1872, and about 15·2 per cent. of the population in 1881 were persons born beyond the District. The increase of registered births over registered deaths since 1872 is returned at 4·59 per cent.

The results of the Census of 1881 may be briefly summarized as follows:—Area, 4719 square miles, with 1751 towns and villages, and 68,978 houses, of which 61,779 were occupied and 7199 unoccupied. Total population, 301,760, namely, males 153,542, and females 148,218. Average density of population, 63·9 persons per square mile; villages per square mile, ·37; number of persons per village, 171; inmates per occupied house, 4·88. Classified according to age, there were—under 15 years, males 69,873, and females 65,310; total children, 135,183, or 44·7 per cent. of the total population: 15 years and upwards, males 83,669, and females 82,908; total adults, 166,577, or 55·2 per cent. Classified according to religion, the Census reports the bulk of the population, namely, 167,746, or 55·5 per cent., as still following their primitive aboriginal forms of religion. Hindus proper number 123,793, or 41 per cent.; Kabírpanthís, 5686; Satnámís, 76; Jains, 284; Muhammadans, 4048; and Christians, 127.

The total aboriginal population, including those now ranked as Hindus, numbers 184,548, of whom Gonds comprise 164,969; Báigas, 11,493; Kols, 7308; and other Kolarian tribes, 778. In no District of the Central Provinces do the aboriginal or hill tribes constitute so large a proportion of the population; and nowhere, except in the

feudatory State of BASTAR, can the habits of the Gonds, with the Pradháns (who act as bards at their births, deaths, and marriages) and the Báigas (who unite the professions of priest and huntsman), be better studied. (*See* CENTRAL PROVINCES.)

Among the Hindus in 1881, Bráhmans numbered 6149 and Ráj-puts, 5520. The bulk of the Hindu population consists of Ahírs, the most numerous caste, 21,520; Pankas, 11,908; Mohrás, 9687; Dhimárs, 6712; Kúrmís, 5198; Telís, 5020; Lodhís, 4565; Káchhís, 2898, etc. Of the 127 Christians, 12 were Europeans, 2 Eurasians, 108 Natives, and 5 unspecified.

Mandlá is still the most thinly populated part of the Central Provinces. The want of inhabitants is felt especially in the eastern portion of the District; though since 1842 much land has there been brought under cultivation by a colony of Máhto Telís. These industrious husbandmen, who were originally resident at Maihír, forsook their hereditary profession of oil-pressing, under the guidance of Ráhtor Telí, and devoted themselves to agriculture. Though occasionally turbulent, they prove excellent cultivators. The prevailing languages in the District are Hindí, Urdu, and Maráthí.

Division into Town and Country.—The only town in the District with more than 3000 inhabitants is MANDLA TOWN, with a population (1881) of 4732. There are 2 villages with from two thousand to three thousand inhabitants; 3 from one thousand to two thousand; 42 from five hundred to a thousand; 444 from two hundred to five hundred; while 1259 villages contained less than two hundred inhabitants. The only municipality is Mandlá, with a total income during the year 1882-83 of £612, almost entirely derived from taxation (2s. 4½d. per head).

Occupations.—The Census of 1881 returned the male population under the following six main headings:—Class (1) Professional, including civil and military, 2302; (2) domestic class, 982; (3) commercial class, including bankers, traders, carriers, etc., 1885; (4) agricultural and pastoral class, including gardeners, 76,827; (5) industrial class, including manufacturers and artisans, 10,927; (6) indefinite and non-productive class, comprising general labourers and male children, 60,619.

Agriculture.—Of the total area of 4719 square miles, only 598 were cultivated in 1883, and of the portion lying waste, 2488 square miles were returned as cultivable. Of the cultivated land, 1057 acres were irrigated by private enterprise. In 1883, 79,703 acres were devoted to the production of rice; 72,000 acres to wheat; while other food-grains occupied 201,713 acres, and oil-seeds 24,857 acres. The cultivation of cotton has not increased in late years, in spite of the favourable character of the soil; and in 1883 was confined to 525 acres. Fibres and sugar-cane are produced in considerable quantities. The magni-

ficent *sál* forests which formerly clothed the highlands of the District have suffered greatly from the *dáhya* system of cultivation practised by the hill tribes, who cut down and burn the wood on the hillsides, and sow their crops in the ashes. Of late years, however, measures have been taken to prevent further damage to the forests. Notwithstanding the fine pastures to be found in parts of the District, and especially in the Pratápgarh *táluk*, the number of cattle is said to have seriously diminished since 1873. The agricultural stock and implements in 1883 were returned as follows:—Cows, bullocks, and buffaloes, 251,347; horses, 83; ponies, 2258; donkeys, 68; sheep and goats, 27,558; pigs, 5299; carts, 464; and ploughs, 27,222.

The Census of 1881 returned a total of 1000 landed proprietors. The tenant cultivators numbered 100,270, of whom 8012 had either absolute or occupancy rights, while 29,758 were tenants-at-will. The remainder consist mostly of assistants in home cultivation, cultivators on sharing tenures, etc. Agricultural labourers numbered 39,214. The total adult agriculturists, male and female, numbered 140,989, or 46·7 per cent. of the District population, the average area of cultivated and cultivable land being 14 acres for each adult agriculturist. Amount of Government assessment, including local rates and cesses levied on land, £9517, or an average of 5¾d. per cultivated acre. Total rental paid by cultivators, including cesses, £17,754, or an average of 10½d. per cultivated acre. In 1883 the average rates of rent per acre were as follows:—Land suited for rice, 1s. 7½d.; for wheat, 1s. 7½d.; for inferior grain, 8¾d.; for sugar-cane, 1s. 10½d. The produce per acre averaged—rice, 360 lbs.; wheat, 475 lbs.; inferior grain, 300 lbs.; cotton, 52 lbs.; and sugar (*gur*), 535 lbs. The prices of produce per cwt. in the same year (1883) were returned as follows:—Rice, 5s. 5d.; wheat, 3s. 6d.; cotton, 11s. 7d.; and raw sugar (*gur*), £1, 10s. 9d. Ninepence per diem is the average wage of a skilled labourer; that of an unskilled labourer, 3d.

Commerce and Trade.—No manufacture exists in the District beyond the ordinary weaving of cotton cloth; and in 1881, the total number of merchants and traders only numbered 465. In many villages, *bázárs* or markets are held, but none of them has any real trade, either export or import. In the eastern portion of the District, the traffic in grain is entirely dependent on foreign traders, who travel through the country with large herds of pack-bullocks, and to a great extent command their own prices. Iron-ore abounds throughout the Máikal Hills. The most valuable metal is produced in the mines near Rámgarh. Those in Mowái, however, supply most of the neighbourhood with axe-heads, ploughshares, and the like. The backward state of Mandlá must be mainly attributed to the want of means of communication. Conveyance by water is nowhere available; and the only

made road in the District is that from Jabalpur to the town of Mandlá. This road brings the District into direct communication with the Great Indian Peninsula Railway.

Administration.—In 1861, Mandlá was formed into a separate District under the British Government of the Central Provinces. It is administered by a Deputy Commissioner, with Assistants and *tahsíldárs.* Total revenue in 1868–69, £8914, of which the land revenue yielded £5651. Total revenue in 1876–77, £16,105, of which the land yielded £9324. Total cost of District officials and police in the latter year, £7021. By 1883–84, the total revenue had increased to £26,817, while the land revenue remained stationary at £9416. Total cost of officials and police (1883–84), £7779. Number of civil and revenue judges of all sorts within the District, 4; magistrates, 5. Maximum distance from any village to the nearest court, 61 miles—average distance, 25 miles. Number of regular police, 310 men, costing £4089; being 1 policeman to about every 15 square miles and to every 983 inhabitants. There is also a rural police or village watch, numbering 974 in 1883. The daily average number of convicts in prison in 1883 was 48·51, of whom 3·21 were females. The number of Government or aided schools under Government inspection in the District in 1883 was 21, attended by 1009 pupils. The last return shows some progress; since in 1872 only 284 children under 12 years, 2 of whom were females, and only 1038 persons above that age, 6 of whom were females, were returned as able to read and write, or under instruction. The Census of 1881 returned 772 boys and 26 girls as under instruction, besides 1751 males and 25 females able to read and write, but not under instruction. Mandlá is still the most backward District in the Central Provinces as regards education, and there only exists 1 school to every 1096 boys of a school-going age.

Medical Aspects.—The climate throughout the District is exceedingly variable. The hottest time of the year is at the break of the monsoon in June, just before the rains begin, and in September, when they cease. The cold weather extends from October or November till the end of February or March. At Mandlá town in 1872, the average temperature in the shade at 2 P.M. was as follows:—May, 112·9° F.; July, 95·3°; December, 81·8°. No later thermometrical returns are available. During the monsoon, the rainfall is heavy, the annual average being from 56 to 60 inches. In 1872 it amounted to 61·7 inches, while in 1876 it was as low as 41·10 inches, and in 1883 44 inches. Storms are frequent; and at times the hailstorms are so violent, that whole fields are swept of their crops as if they had been reaped. In March, the hailstones are sometimes as large as pigeons' eggs, and, when heaped together in a shady place, will often remain unmelted during the whole of two days. Mandlá has, throughout its

by Akbar in 1570. Of late years measures have been taken for the unusually virulent, and does not yield easily to quinine. Strangers are peculiarly liable to it. Cholera visits the country occasionally, and small-pox carries off large numbers. Of late, however, vaccination has made considerable progress. In 1883, the registered death-rate per thousand of the population amounted to 27·69; the rate the previous five years was 35·26 per thousand. In 1883, the charitable dispensaries at Mandlá and Rámgarh afforded medical relief to a total of 6959 patients. [For further information regarding Mandlá, see the *Central Provinces Gazetteer*, by Mr. (now Sir) Charles Grant (Nágpur, 1870); also the *Settlement Report of Mandlá District*, by Captain H. E. C. Ward (1869); and the several Administration and Departmental Reports of the Central Provinces from 1880 to 1883.]

Mandlá.—The south-western *tahsíl* or revenue Sub-division of Mandlá District, Central Provinces. Area, 2042 square miles; villages, 960; houses, 34,986. Total population (1881) 171,798, namely, males 86,988, and females 84,810; persons per square mile, 84·13. Total adult agriculturists, male and female, 78,571, or 45·7 per cent. of the Sub-divisional population, the average area of cultivated and cultivable land being 11 acres for each adult. Total amount of Government assessment, including local rates and cesses levied on land, £6009, or an average of 6⅛d. per cultivated acre; total rental actually paid by cultivators, £12,364, or an average of 1s. 0½d. per cultivated acre. In 1883, Mandlá Sub-division contained 3 civil and 4 criminal courts, 23 police stations and outposts; strength of regular police, 104 men, besides 648 village watchmen (*chaukídárs*).

Mandlá.—Administrative head-quarters and principal town of Mandlá District, Central Provinces; situated in lat. 22° 35′ 6″ N., and long. 80° 24′ E., 1770 feet above sea-level, on the Narbadá (Nerbudda) river, which surrounds it on three sides. Population (1881) 4732, namely, Hindus, 3726; Muhammadans, 744; Kabírpanthís, 23; Christians, 83; and aboriginal tribes, 156. Municipal revenue (1882-83), £612. The town was made the seat of government in 1680 by Narendra Sá, the 57th Rájá of the Garhá-Mandlá line, who constructed a fort by the river, within which he built a large palace. In 1739, Mandlá was taken by the Peshwá, Bálájí Bájí Ráo, from whom the gate on the Jabalpur road, by which he entered, received its name (Fateh Darwáza). The Maráthás strengthened the open side of the town by a wall, with bastions and gates. In 1818, General Marshall took the town by storm. Thirty-seven temples, raised between 1680 and 1858, decorate the river bank. The only manufacture is of bell-metal vessels, made from an alloy of zinc and copper.

Mandladaí.—Hill in Seoní District, Central Provinces; 20 miles north-east of the town of Seoní. Height, 2500 feet above sea-level.

made road in the District is that from Jabalpur to the town of Mandla.

Mandlesar.—Town in Indore State, Central India; situated on the right bank of the Narbadá (Nerbudda), in lat. 22° 11′ N., and long. 75° 42′ E., on the old route from Mhow (Mau) to Asírgarh, 30 miles south of the former and 83 miles north-west of the latter. Population (1881) about 2500. The surrounding country is elevated about 650 feet above the level of the sea, and is more than 1600 feet below the Jam *ghát* of Málwá. The Narbadá is at this point about 500 yards wide, and unfordable except in spring; even then it is only crossed with difficulty. There is a ferry. The town is surrounded by a mud wall, and has a small well-built masonry fort. Once a cantonment, and the residence of a British functionary, known as the 'Political Assistant to the Resident at Indore.' This official had charge of the British tracts in Nimár, and of the possessions of Holkar under British management. Mandlesar was transferred to Holkar in 1867 in part exchange for his domains in the Deccan. It is now the head-quarters of Holkar's District of Nimár, and the fort is used as a jail for convicts under long sentences. What importance the town has, it owes to Colonel Keatinge, who directed most of its modern improvements. Post-office.

Mándogarh (*Mandu*).—Extensive deserted town in Dhár State, Central India, the ancient capital of the Muhammadan kingdom of Málwá; situated in lat. 22° 21′ N., and long. 75° 26′ E., 15 miles north of the right bank of the Narbadá (Nerbudda); distant from Mhow (Mau) 30 miles south-west, from Dhár 20 miles, and from Indore 38 miles south-west. The city, 1944 feet above sea-level, occupies 8 miles of ground, extending along the crest of the Vindhyas; and is separated from the table-land, with which it is on a level, by a valley between 300 and 400 yards broad and about 300 feet deep. According to Malcolm, Mándogarh was founded in 313 A.D.; and the same writer says that the circuit of the ramparts is 37 miles. It is not probable, however, that the whole of this space was inhabited.

Among the buildings of which ruins yet remain are—the Jama Masjid, or Great Mosque, less injured than any of the others, and said to be the finest and largest specimen of Afghán architecture extant in India; the marble mausoleum of Hoshang Ghorí, King of Málwá, who raised the city to great splendour; and the palace of Báz Bahádur, another King of Málwá. These must at one time have been magnificent buildings, and are still, in their ruined state, very striking on account of their massive proportions. The fortifications were constructed by Hoshang Ghorí, who reigned in the beginning of the 15th century, and in whose time the city attained its greatest splendour. In 1526, Mándogarh was taken by Bahádur Sháh, ruler of Gujarát, and annexed to his dominions, of which it remained part until their conquest

by Akbar in 1570. Of late years measures have been taken for the preservation of some of the most interesting ruins.—*See* MALWA.

Mandor.—Ruined town in Jodhpur State, Rájputána; situated in lat. 26° 21′ N., and long. 73° 5′ E. It was taken from a Purihar prince by Chanda, chief of the Rahtor Rájputs, in 1381 A.D., and was the capital of the Rahtor territory until 1459, when the seat of government was transferred to Jodhpur, 3 miles distant. The town is placed upon a commanding eminence, and was surrounded by a wall with massive bastions built of huge blocks of stone. Much of the material of the wall has been removed to build the new capital; but the ruins within are of great interest, comprising gigantic figures of the gods and heroes of Indian antiquity. There are also some Buddhist and Jain remains, and several modern buildings, conspicuous among which is the stone palace of Ajit Singh (died 1724), now uninhabited save by swarms of bats. Mandor contains the cenotaphs of the ruling chiefs of the country. Every Monday, a number of devotees come to Mandor from Jodhpur, to pay their devotions at the numerous shrines. The fixed population of the place is very small.

municipality and military station, with courts, churches, custom-house,

Mandra.—Town in the Torawati District of Jaipur State, Rájputána. Population (1881) 5567. Hindus number 5411; Muhammadans, 124; and 'others,' 32.

Mandrák.—Village in Koil *tahsíl*, Alígarh District, North-Western Provinces; situated on the Agra road, 7 miles south of Koil. Population (1881) 1506. Noticeable for the spirited defence of the Mandrák Indigo Factory by Mr. Watson and 11 Europeans against 1000 Musalmán rebels on the 1st of July 1857.—*See* ALIGARH DISTRICT.

Mandsaur. — Town in Gwalior State, Central India; situated on a tributary of the Chambal, 31 miles south of Nímach (Neemuch), and about 80 miles north-west of Ujjain (Oojein). Population (1881) 22,596, namely, 11,856 males and 10,740 females. Hindus numbered 14,660; Muhammadans, 7077; and 'others,' 853. Mandsaur is famous as giving name to the final treaty between Holkar and the British Government in 1818, at the end of the Maráthá-Pindárí war. A station on the Málwá line of the Rájputána-Málwá State Railway.

Mandu.—Extensive deserted town in Dhár State, Central India.—*See* MANDOGARH.

Mandu Mahál Sirgirá.—Small estate or *zamíndárí* attached to Sambalpur District, Central Provinces, 42 miles south-west of Sambalpur town. Population (1881) 1381, entirely agricultural, residing in 4 villages; area, 6 square miles. Chief product, rice. The *zamíndár* took part in the disturbances of 1858, but was afterwards amnestied,

and the estate restored in 1862. Sirgirá village, the residence of the *zamíndár*, situated on the Utali stream, has a population of 537 souls.

Mandurda (or *Mendarda*).—Town in the Sorath division of Káthiáwár, Bombay Presidency; situated on the outskirts of the Gir forest, 15 miles south of Junágarh. Considerable trade in *ghi.* Population (1881) 5406. Hindus numbered 4246; Muhammadans, 817; and Jains, 343.

Mándvi (*Mándavi*).—Seaport in the State of Cutch (Kachchh), Bombay Presidency; situated in lat. 22° 50′ 30″ N., and long. 69° 31′ 45″ E., on the coast of the Gulf of Cutch, 36 miles south-west of Bhúj, the capital of the State. Population (1872) 35,988; (1881) 35,980, namely, 17,285 males and 18,695 females. Hindus numbered 18,685; Muhammadans, 13,809; Jains, 3472; and 'others,' 14. Mándvi, or the mart, also called Maska Mándvi, in old times was known as Raipur or Riyán. Two suburbs, Old and New Saraya, inhabited by traders and seafaring men, stand outside the town walls. Vessels of 70 tons can come within 500 yards. Port of call weekly for British India steamers. The *mualims* (pilots) are noted throughout Cutch. Lighthouse with a dioptric light of the fourth order.

Post-office.

Mándogarh (*Mandu*).—Extensive deserted town in Dhár State, Central India, the ancient capital of the Muhammadan kingdom of Málwá; situated in lat. 22° 21′ N., and long. 75° 26′ E., 15 miles north of the right bank of the Narbadá (Nerbudda); distant from Mhow (Mau) 30 miles south-west, from Dhár 20 miles, and from Indore 38 miles south-west. The city, 1944 feet above sea-level, occupies 8 miles of ground, extending along the crest of the Vindhyas; and is separated from the table-land, with which it is on a level, by a valley between 300 and 400 yards broad and about 300 feet deep. According to Malcolm, Mándogarh was founded in 313 A.D.; and the same writer says that the circuit of the ramparts is 37 miles. It is not probable, however, that the whole of this space was inhabited.

Among the buildings of which ruins yet remain are—the Jama Masjid, or Great Mosque, less injured than any of the others, and said to be the finest and largest specimen of Afghán architecture extant in India; the marble mausoleum of Hoshang Ghorí, King of Málwá, who raised the city to great splendour; and the palace of Báz Bahádur, another King of Málwá. These must at one time have been magnificent buildings, and are still, in their ruined state, very striking on account of their massive proportions. The fortifications were constructed by Hoshang Ghorí, who reigned in the beginning of the 15th century, and in whose time the city attained its greatest splendour. In 1526, Mándogarh was taken by Bahádur Sháh, ruler of Gujarát, and annexed to his dominions, of which it remained part until their conquest

Mangalkot.—Village in Bardwán District, Bengal. Lat. 23° 31′ 50″ N., long. 87° 56′ 30″ E. Population under 5000. Police station.

Mangalore.—*Táluk* of South ...

Mándvi.—Chief town of the Mándvi Sub-division of Surat District, Bombay Presidency, lying in lat. 21° 18′ 20″ N., and long. 73° 22′ 30″ E. Population (1881) 4744; municipal income (1882–83), £461; incidence of municipal taxation, 1s. 8½d. Post-office, dispensary, and five schools with 370 scholars in 1883–84.

Mándwa.—Petty State in Sankheda Mehwas group, Rewá Kántha, Bombay Presidency. Area, 16½ square miles, containing 16 villages;

Mangalore [*Mangala*, 'Fortunate;' the native name is *Kodiyál;* the *Mangalúr*, *Manjarúr*, and *Mangaruth*, according to the Greek writer Cosmos (6th century), of Arab travellers; *Nitriæ Emp.*—Yule. The name Mangalúr is perhaps derived from the temple of Mangala-Devi to the south-east of the town].—Chief town of South Kánara District, Madras Presidency. Lat. 12° 51′ 40″ N., long. 74° 52′ 36″ E. Population (1871) 29,712; (1881) 32,099, namely, 16,539 males and 15,560 females, occupying 4979 houses. Hindus number 18,590; Muhammadans, 5896; Christians, 7568; and 'others,' 45. A seaport, municipality and military station, with courts, churches, custom-house,

Mandra.—Town in the Torawati District of Jaipur State, Rájputána. Population (1881) 5567. Hindus number 5411; Muhammadans, 124; and 'others,' 32.

Mandrák.—Village in Koil *tahsíl*, Alígarh District, North-Western Provinces; situated on the Agra road, 7 miles south of Koil. Population (1881) 1506. Noticeable for the spirited defence of the Mandrák Indigo Factory by Mr. Watson and 11 Europeans against 1000 Musalmán rebels on the 1st of July 1857.—*See* ALIGARH DISTRICT.

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and the estate restored in 1862. Sirgirá village, the residence of the *zamíndár*, situated on the Utali stream, has a population of 537 souls.

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Mándvi (*Mándavi*).—Seaport in the State of Cutch (Kachchh), Bombay Presidency; situated in lat. 22° 50′ 30″ N., and long. 69° 31′ 45″ E., on the coast of the Gulf of Cutch, 36 miles south-west of Bhúj, the capital of the State. Population (1872) 35,988; (1881) 35,980, namely, 17,285 males and 18,695 females. Hindus numbered 18,685; Muhammadans, 13,809; Jains, 3472; and 'others,' 14. Mándvi, or the mart, also called Maska Mándvi, in old times was known as Raipur or Riyán. Two suburbs, Old and New Saraya, inhabited by traders and seafaring men, stand outside the town walls. Vessels of 70 tons can come within 500 yards. Port of call weekly for British India steamers. The *mualims* (pilots) are noted throughout Cutch. Lighthouse with a dioptric light of the fourth order

Colonel Keatinge, who directed most ...

Post-office.

Bounded on the north and east by the Baroda and Rájpipla territories; on the south-east by the Bardoli Sub-division of Surat District; and on the south and west by Baroda territory. Area, 280 square miles. Population (1872) 48,367; (1881) 50,810, of whom 25,546 are males and 25,264 females. There are 140 villages and 1 town; occupied houses, 9509; unoccupied, 1174. Hindus number 13,876; Muhammadans, 3417; and 'others,' 33,517.

The western part of the Sub-division is the most fertile and prosperous; in the east the population gradually becomes scanty and unsettled, and cultivation disappears. The climate is the worst in Surat District. Average rainfall, 47·6 inches. The river Tápti forms the southern boundary. Staple crops—rice, cotton, and *jodr*.

In 1871–72, the year of settlement, there were 9560 holdings with an average area of 9 acres, and paying an average rental of £1, 9s. Of the total area of 280 square miles, 22 square miles are occupied by the lands of alienated villages. The remainder contains 88,905 acres of occupied land; 34,142 acres of cultivable waste; 1595 acres of waste; 31,159 acres of forests; and 9421 acres of village sites, roads, tanks, and rivers. In the total of 123,047 acres there are 6863 acres of alienated land in Government villages. Of the cultivated area in 1874 (70,167 acres), 21 per cent. was fallow or under grass. Of the remaining 55,250 acres, grain crops occupied 36,229 acres; pulses, 6692 acres; oil-seeds, 5615 acres; fibres, 8978 acres (of which 8236 acres were under cotton); and miscellaneous crops, 409 acres. In 1883, the Sub-

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Mándvi.—Chief town of the Mándvi Sub-division of Surat District, Bombay Presidency, lying in lat. 21° 18′ 20″ N., and long. 73° 22′ 30″ E. Population (1881) 4744; municipal income (1882–83), £461; incidence of municipal taxation, 1s. 8½d. Post-office, dispensary, and five schools with 370 scholars in 1883–84.

Mándwa.—Petty State in Sankheda Mehwas group, Rewá Kántha, Bombay Presidency. Area, 16½ square miles, containing 16 villages;

Mangalore [*Mangala*, 'Fortunate;' the native name is *Kodiyál;* the *Mangalúr*, *Manjarúr*, and *Mangaruth*, according to the Greek writer Cosmos (6th century), of Arab travellers; *Nitriæ Emp.*—Yule. The name Mangalúr is perhaps derived from the temple of Mangala-Devi to the south-east of the town].—Chief town of South Kánara District, Madras Presidency. Lat. 12° 51′ 40″ N., long. 74° 52′ 36″ E. Population (1871) 29,712; (1881) 32,099, namely, 16,539 males and 15,560 females, occupying 4979 houses. Hindus number 18,590; Muhammadans, 5896; Christians, 7568; and 'others,' 45. A seaport, municipality and military station, with courts, churches, custom-house,

35,442 males and 37,473 females. Hindus numbered 71,212; Muhammadans, 1642; and Christians, 61. Land revenue (1874–75), exclusive of water rates, £5679, or 2s. 5d. per head. The *táluk* contains 2 criminal courts; police stations (*thánás*), 10; regular police, 77 men; village watch (*chaukídárs*), 424. Revenue, £13,489. Sheep-breeding is extensively carried on, and fine blankets are manufactured.

Mandya. — Village in Mysore District, Mysore State, and head-quarters of the Mandya *táluk;* 28 miles by road north-east of the city of Mysore. Lat. 12° 32′ 10″ N., long. 76° 55′ 50″ E. Population (1881) 3770. According to local legend, while the country was yet primeval jungle, a *rishí* or devotee settled here, and the spot has ever since been sacred. It remained a *sarvamányan* village for Bráhmans, until Tipú Sultán withdrew the endowments. A station on the Mysore State Railway.

Maner.—Town and municipality in Patná District, Bengal; situated in lat. 25° 38′ 40″ N., and long. 84° 55′ 10″ E., a few miles below the junction of the Son (Soane) with the Ganges. Population (1881) 5769, namely, Hindus 4169, and Muhammadans 1600; municipal income (1883–84), £123; rate of taxation, 4¼d. per head of population; police force, 24 men.

the coffee of Coorg, and the greater portion of that of Mysore, and trades directly with Arabia and the Persian Gulf. In 1875, 3600 ships of 264,000 tons entered. The exports in that year were valued at £505,800, and the imports at £272,704. The average annual value

...ge, the residence of the
...stream, has a population of 537 souls.

...(or *Mendarda*).—Town in the Sorath division of Káthiá-

Mangahpett (*Mangampet*).—Town in the territory of the Nizám, Haidarábád (Hyderábád), Deccan; situated in lat. 18° 13′ N., and long. 80° 35′ E., on the right bank of the Godávari river; distant from Haidarábád 150 miles north-east. Remarkable for a series of standing stones, over 20 feet in height, and arranged in circles. These pillars are cut out of sandstone, which is abundant in this part of the country. There is a small mud fort at Mangahpett.

the capital of the State. Population (1872) 35,988; (1881) 35,980, namely, 17,285 males and 18,695 females. Hindus numbered 18,685; Muhammadans, 13,809; Jains, 3472; and 'others,' 14. Mándvi, or the mart, also called Maska Mándvi, in old times was known as Raipur or Riyán. Two suburbs, Old and New Saraya, inhabited by traders and seafaring men, stand outside the town walls. Vessels of 70 tons can come within 500 yards. Port of call weekly for British India steamers. The *mualims* (pilots) are noted throughout Cutch. Lighthouse with a dioptric light of the fourth order.

Colonel Keatinge, who ...

Post-office.

Mangalagiri (or *Pátamangalagiri*, Hill of Happiness).—Town in Gantur *táluk*, Kistna District, Madras Presidency; situated in lat. 16° 26′ N., and long. 80° 36′ E., about 7 miles south of Bezwáda. Population (1881) 5617; number of houses, 1260. Hindus number 5169, and Muhammadans 448. Contains 2 famous shrines to Narasingha-swámí (Vishnu), one a two-storied rock-cut temple of great antiquity, the second of more modern date, with a fine *gopura*. Large and deep reservoir, drained in 1832 during a time of famine, and found to contain nearly 10,000 matchlocks. Sub-magistrate's court, post-office, travellers' bungalow, and police station.

Mangaldái.—Sub-division in Darrang District, Assam, with head-quarters at Mangaldái village. Area, 1320 square miles, with 1036 villages and 31,256 houses. Population (1881) 160,229, namely, Hindus, 146,464; Muhammadans, 13,443; and 'others,' 322. It contains the 3 *thánás* or police circles of Mangaldái, Kálígáon, and Chatgári.

Mangaldái.—Village in Darrang District, Assam; situated in lat. 26° 27′ N., and long. 92° 5′ E., near the north or right bank of the Brahmaputra, about 60 miles west from Tezpur. Population (1881) 692. As the head-quarters of the Sub-division of the same name, Mangaldái has recently been greatly improved by the erection of

acres), 21 per cent. was fallow or under ... 55,250 acres, grain crops occupied 36,229 acres; pulses, 6692 acres; oil-seeds, 5615 acres; fibres, 8978 acres (of which 8236 acres were under cotton); and miscellaneous crops, 409 acres. In 1883, the Sub-

Mangalkot.—Village in Bardwán District, Bengal. Lat. 23° 31′ 50″ N., long. 87° 56′ 30″ E. Population under 5000. Police station.

Mangalore.—*Táluk* of South Kánara District, Madras Presidency. Area, 620 square miles. Population (1881) 249,049, namely, 124,313 males and 124,736 females; density, 402 persons per square mile. Number of villages, 306; towns, 2; houses, 42,805. Hindus number 184,118, or 74 per cent.; Muhammadans, 25,475; Christians, 34,254; and 'others,' 5202. The *táluk* contains 3 civil and 5 criminal courts; police stations (*thánás*), 10; regular police, 251 men. Land revenue, £34,810.

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Mangalore, which in the 16th century had been three times sacked by the Portuguese, was, subsequent to 1640, a stronghold of the Ikeri or Bednúr Rájás. When that dynasty succumbed to Haidar Alí (1763), Mangalore became the head-quarters of his new navy. In 1768 the English held Mangalore for a short time; and in 1783 the fort was gallantly defended by an English garrison against overwhelming odds, but, after a nine months' siege, was taken (1784) by Tipú. In 1799, Mangalore became British territory; and since that time it has only once been disturbed by the appearance of an enemy—namely, during the Coorg insurrection in 1837, when the rebel tribe of Gaudas entered the town, burnt the public offices, and then retired.

The town is picturesque, clean, and prosperous. The native houses are laid out in good streets, and the European quarter is particularly pleasant. Like all the towns on the Malabar coast, Mangalore is buried amid groves of cocoa-nut palms. Situated on the backwater formed by the convergent mouths of the Netrávati and Gurpur rivers, it has water on three sides of it. Large vessels cannot cross the bar into the harbour; but Arabian *bagálás* and country craft enter in considerable numbers. Mangalore cleans and exports a large portion of the coffee of Coorg, and the greater portion of that of Mysore, and trades directly with Arabia and the Persian Gulf. In 1875, 3600 ships of 264,000 tons entered. The exports in that year were valued at £505,800, and the imports at £272,704. The average annual value

of the exports for the five years ending in 1882–83 was £534,602; and of imports, £251,770. In 1882–83 the exports were valued at £499,983, and the imports at £207,110. In 1882–83, 1433 ships of 163,881 tons entered. The lighthouse is merely a harbour light, 1½ miles E.N.E. of the river entrance. Boats of large size are safely carried as far as Bantwal or Páni Mangalore up the Netrávati.

Mangalore is the only municipal town in the South Kánara District. The municipality had in 1883–84 an income from taxation of £2391; incidence of taxation, 1s. 4½d. per head. The municipal Commissioners have done much towards improving the place, and have recently established a handsome market.

There is a large native Roman Catholic population in Mangalore, with a European bishopric, several churches, a convent, and a college, for which an imposing building is in course of erection. The Basel Lutheran Mission has its head-quarters here, and has done much good in teaching trades, etc. Good cloth is woven at their establishment; the making of roof-tiles, printing, and binding is also taught. The Provincial School, a fine building, is well attended, as is also the Roman Catholic College now held in a temporary building. The garrison consists of one Native infantry regiment, about 700 strong.

Mangalsí.—*Parganá* in Faizábád *tahsíl*, Faizábád (Fyzábád) District, Oudh; occupying the north-west corner of the District, between the Gogra and the Madha rivers, which respectively form its northern and southern boundaries. It is perhaps the most fertile and the best cultivated portion of the District. It is well wooded, and the scenery, though as a rule monotonous and tame, is often pretty. In shape, the *parganá* is long and narrow. Near its western end, a broad belt of sandy soil runs nearly across the whole. This is, as might be expected, broadest towards the river; and the country there breaks into great swelling downs, which form an agreeable change in the prospect. Near the eastern end, a ravine, which debouches on the Gogra, cuts far back into the *parganá*, and its sides are for a considerable distance sandy and bleak. With these exceptions, the soil is generally of first-rate quality. Marshes are common, tanks abundant, and well-water is found near the surface. The *parganá* has recently received considerable additions of area from the neighbouring tracts of Pachhimráth and Rudaulí in Bara Banki District. It now contains an area of 116 square miles, and a population (1881) of 91,954 persons, residing in 114 villages. Of these, 71 are held under *tálukdárí*, 41 under *mufrád*, and 2 under rent-free tenures. Government land revenue demand, £10,129.

Mangalvedha.—Town in the Native State of Sángli, Kolhápur Agency, Bombay Presidency; situated in 17° 30′ 42″ N. lat., and 75° 29′ 19″ E. long. Population (1881) 9156. Hindus number 8241;

Muhammadans, 849; Jains, 65; and Christians, 1. Mangalvedha was founded before the Muhammadan period by a Hindu prince named Mangal, whose capital it was. Judging from the remains of an old temple, the place must have been of some importance and wealth. After its destruction by the Muhammadans, the materials were used in building the fort in the centre of the town. There are 3 schools, and the town is governed by a municipality.

Mángáon.—Sub-division of Kolába District, Bombay Presidency. Bounded on the north by Roha; on the east by the Panth Sachiv territory and Mahád; on the south by Mahád; and on the west by Janjira. Area, 353 square miles. Population (1872) 72,733; (1881) 81,085, namely, 40,299 males and 40,786 females; density, 229 persons per square mile. There are 225 villages, containing 15,549 houses. Hindus number 76,078, or 93·8 per cent.; Muhammadans, 4833; and 'others' (mostly Beni-Israels), 174.

The Mandád river flows through the north and west of the Sub-division. Except in the south, the country is broken by a number of detached hills. Besides the Mandád, the Ghod river waters the region. In 1881–82, the number of wells was 465. Average rainfall during fifteen years ending 1881, 118 inches.

The Sub-division contained 13,450 holdings in 1881, with an average area of 9⅓ acres, and paying an annual average rent of £1, 2s. The survey rates were fixed under the Bombay settlement in 1863–66 for a period of 30 years. The average rent paid on an acre of rice land is 8s. 11d.; on garden land, 7s. 7¼d.; on average upland, 5d. Of the total area of 353 square miles, nearly three-fourths of a square mile are occupied by the lands of alienated villages. The remainder contains 126,654 acres of cultivable land; 30,380 acres of uncultivable waste; 490 acres of grass; 22,420 acres of forest; 54,508 acres of village sites, roads, rivers, and streams. Of 126,654 acres of cultivable land, 456 acres are alienated lands in Government villages. The area of land held for tillage in 1880 was 123,609 acres, of which nearly 24 per cent. lay fallow, or was under grass. Of the remaining 94,087 acres, 451 acres were twice cropped. Of 94,538 acres under actual tillage, grain crops occupied 84,355 acres; pulses, 7115 acres; oil-seeds, 1591; fibres, 1439 acres (all of them under brown hemp); and miscellaneous crop, 38 acres.

In 1883, the Sub-division contained 2 criminal courts; police circles (*thánás*), 4; regular police, 37 men. Land revenue (1881), £14,965.

Mángáon.—Village in Kolába District, Bombay Presidency; the head-quarters of Mángáon Sub-division. Population (1881) 464. Mángáon is situated on the left bank of the Kál river, here crossed by a fine masonry bridge of six 50-feet spans, built in 1871. Fifteen miles from the historic Ráigarh hill. Sub-divisional offices, and vernacular school.

Manglaur.—Town in Rúrkí *tahsíl*, Sahåranpur District, North-Western Provinces; situated in lat. 29° 47′ 11″ N., and long. 77° 54′ 48″ E., 6 miles south of Rúrkí, and 22 miles south-east of Sahåranpur town. Founded, according to tradition, by Rájá Mangal Sain, a Rájput feudatory of Vikramáditya. Traces of an old fortress may still be noticed near the town. Population (1872) 9202; (1881) 9990, namely, Hindus, 3067; Jains, 83; and Muhammadans, 6840. A house-tax raised for police and conservancy purposes yielded £310 in 1881–82. The Musalmán inhabitants consist chiefly of weavers, now much impoverished; some of the Hindu *zamíndárs* are wealthy. No trade; many shops out of repair. Brick-built houses, surrounded by mud huts, and embedded among groves or luxuriant crops. The sanitary arrangements are very defective, and the people suffer much from ague, enlarged spleen, and other malarious diseases. The place was once celebrated for carpentry, but the best workmen died during the fever epidemic of 1868–69. The industry is now, however, reviving. Government has set on foot considerable local improvements. Police station, post-office, school, and dispensary.

Mangoli.—Town in Bijápur (formerly Kaládgi) District, Bombay Presidency.—*See* MANAGOLI.

Mangor.—Fortified village in Gwalior State, Central India; situated in lat. 26° 6′ N., and long. 78° 6′ E., at the base of a high range of hills. The scene of an engagement, on the 29th December 1843, between the British under General Grey and the Maráthás. The latter were driven with great loss from all points of their position, and all their artillery and ammunition were captured. The British had 35 men killed and 182 wounded.

Mángrol (*Mangarol Bandar*, apparently the *Monoglossum* of Ptolemy).—Seaport town in Junágarh State, Sorath *prant* or division of Káthiáwár, Bombay Presidency; situated in lat. 21° 8′ N., and long. 70° 14′ 30″ E., on the south-west coast, a mile and a half north-east from the *bandar*, which is washed by the Arabian Sea. Population (1872) 15,341; (1881) 12,123, namely, 5666 males and 6457 females. Hindus number 5190; Muhammadans, 5765; and Jains, 1168. The mosque here is the finest in Káthiáwár. A tablet in one part of the building records the date of its foundation, 1383 A.D. The town belongs to a petty Musalmán chief, styled the Shaikh of Mángrol, who pays an annual tribute of £1150 to the Nawáb of Junágarh. The harbour is much exposed, being open to all but north-east and north-west winds, and will not admit more than three or four *kotiyehs* or native vessels at a time. Soundings regular, over a muddy but rocky bottom, from 1 to 1½ mile off shore. Manufacture of ivory and sandal-wood inlaid boxes. Mángrol is famous for its musk melons. Post-office, vernacular and girls' school. At Mángrol is a country lantern set on a square house,

60 feet high and 400 yards from the landing-place; gives a white fixed light seen 8 miles at sea.

Mángrol.—Town in Kotah State, Rájputána; situated in lat. 25° 17′ N., and long. 76° 35′ 15″ E., on one of the principal trade routes between Gwalior territory and Kotah, and distant 46 miles east of Kotah town. Population (1881) 5906. Hindus numbered 4608; Muhammadans, 1173; and 'others,' 125. Mángrol is the site of a battle fought on the 1st October 1821, between the army of Máharáo Kishore Singh, the ruler of Kotah, and Zálim Singh, the minister of the State, assisted by a detachment of British troops. Kishore Singh was utterly defeated, and his brother Prithwi Singh killed. Two British officers, Lieutenants Clarke and Read, of the 4th Regiment Bengal Light Cavalry, were also killed in this engagement; and a monument erected to their memory is situated outside the town.

Manipur State consists principally of an extensive valley, situated in the heart of the difficult and mountainous country which stretches between Assam, Cachar, Burma, and Chittagong. The total area of the territory is about 8000 square miles, that of the valley proper about 650 square miles. Number of villages, 954; houses, 45,322; total population (1881) 221,070.

Physical Aspects.—The hill ranges in Mani...

Mangrúl.—*Táluk* of Básim District, Berar. Area, 634 square miles; contains 208 villages. Population (1867) 64,249; (1881) 76,142, namely, 39,426 males and 36,716 females; density of population, 120·1 persons per square mile. Number of houses, 13,268. Hindus number 71,276; Muhammadans, 4156; Jains, 685; Sikhs, 23; and Christians, 2. Area occupied by cultivators, 254,721 acres. Total agricultural population, 58,325. The *táluk* in 1883 contained 1 civil and 2 criminal courts; police circles (*thánás*), 6; regular police, 58 men; village watch, 113. Total revenue, £15,278, of which £12,305 was derived from land.

Mangrúl.—Town in Amraoti District, Berar. Population (1881) 6122, of whom 5675 were Hindus, 422 Musalmáns, and 25 Jains.

Mangrúl Pír.—Town in Básim District, Berar. Lat. 20° 19′ N., long. 77° 24′ 20″ E. Population (1881) 4900, of whom 1642, or 33·5 per cent., were Muhammadans. Chief town of Mangrúl *táluk*. It owes its affix Pír, which distinguishes it from several other Mangrúls, to the *dargahs* or burial shrines of Badar-ud-dín Sáhib and Shunam Sáhib, said to be about 400 years old. The principal of these is enclosed by a substantial bastioned wall, and is well endowed. Old mosques and other buildings show that this was once a favourite Musalmán town, and its population still consists largely of Muhammadans.

Maníar (*Munír*).—Town in Bánsdih *tahsíl*, Ballia District, North-Western Provinces; situated on the right bank of the Gogra river,

7 miles from Bánsdih town, in lat. 25° 59′ 12″ N., long. 84° 13′ 36″ E. Population (1872) 5285; (1881) 8600, namely, Hindus 7952, and Muhammadans 648. The houses of Maníar cluster round high artificial mounds, formerly the sites of the fortified residences of the principal *zamíndárs*, but now lying waste and bare. It has no main thoroughfare, nor does it possess any public building worthy of notice. Its importance is derived from its grain market, which is the largest in the District. The manufactures consist of sugar-refining and cloth-weaving. A small house-tax provides for the watch and ward and conservancy of the town.

Maniárí.—River in Biláspur District, Central Provinces. Rising in the Lormí Hills, it flows south and west past the towns of Lormí and Takhtpúr, forming the boundary between the Mungelí and Biláspur *tahsíls*, and, after a circuitous course of 70 miles, falls into the SEONATH

... for carpentry, but the best workmen died during the fever epidemic of 1868–69. The industry is now, however, reviving. Government has set on foot considerable local improvements. Police station, post-office, school, and dispensary.

Mangoli.—Town in Bijápur (formerly Kaládgi) District, Bombay Presidency.—*See* MANAGOLI.

Mangor.—Fortified village in Gwalior State, Central India; situated

Mahádewa, and on the west by Gonda. Area, 127 square miles, of which 42 per cent. is cultivated, 43 per cent. cultivable but not under tillage, and 15 per cent. uncultivable waste. Population (1869) 41,656; (1881) 46,887, namely, males 24,087, and females 22,800. Bráhmans form the most numerous caste (10,263); followed by Korís (6405), Kurmís (5031), Ahírs (4926), Rájputs (2326), and Muráos (1107). Total Government land revenue, £5147. Of the total number of 196 villages, 170 are held under *tálukdárí* tenure, and 26 under *zamíndárí* tenure. The *parganá*, which is only intersected by one line of road, contains 7 small village schools. The tract was originally in the possession of Thárus. These were displaced by the Bhars, a chief of whom, called Makka, cleared the jungle and founded the village of Mánikpur. After ruling for six generations, the Bhars were in turn subdued by Newál Sáh, a Chandrabansi or Bandalghoti Rájput, whose family held it for twelve generations, till on the death of the last of the line without issue his mother adopted a nephew, her sister's husband, the son of the Bisen Rájá of Gonda. The Bisen clan have held the *parganá* ever since, the present head of the family being Rání Sultánat Kunwár, whose estate comprises 159 villages, yielding a revenue of £2854. The little village of Mánikápur, the chief place in the *parganá*, contained only 490 inhabitants in 1881.

Mánikar Char.—Village in the extreme south of Goálpárá District,

(1032-33). It became permanently a part of the Muhammadan conquests on the overthrow of the Kanauj dynasty in 1193-94; but for long, from its border situation, formed the scene of numerous struggles between the rival Muhammadan powers in this part of India. It was incorporated with the Delhi empire on the overthrow of the Jaunpur kingdom by Bahlol Lodi; but upon this monarch's division of his dominions at his death, the country was again given over to internecine strife, until Akbar finally established the Mughal sovereignty. At the time of his famous territorial distribution of his dominions, Mánikpur was included as one of the *sarkárs* or Districts of the Allahábád *subah* or Province.

During the reigns of the next three Mughal emperors, Mánikpur was at the height of its prosperity, being the residence and court

showing a good natural boundary along the crest of the Angoching hills to the Shiroi-ferar peak.

Manipur State consists principally of an extensive valley, situated in the heart of the difficult and mountainous country which stretches between Assam, Cachar, Burma, and Chittagong. The total area of the territory is about 8000 square miles, that of the valley proper about 650 square miles. Number of villages, 954; houses, 45,322; total population (1881) 221,070.

Physical Aspects.—The hill ranges in Manipur generally run north and south, with occasional connecting spurs and ridges of lower elevation between. Their greatest altitude is attained in the north, about four

tard-oil and tobacco. Fair held here, chiefly for religious purposes. Communication by boat, except in the dry season. Population (1881) 11,289, namely, Hindus, 5860, and Muhammadans, 5429. Municipal revenue (1883-84), £445; rate of taxation, 9⅜d. per head of population. Dispensary.

The general aspect of the hill ranges is that of irregular serrated ridges, occasionally rising into conical peaks and flattened cliffs of bare rock. Sometimes, as in the western range of hills overlooking the Manipur valley, the summit of the hills presents a more open and rolling character; and facing the valley is an extent of hill land comparatively flat and of considerable size.

Looking down the valley, the object which first prominently presents itself is the Logták Lake, lying in front and to the right, with the low bare hills which skirt it reflected on its surface. To the south of the Logták Lake, as far as the boundary of hills in that direction, the valley is almost entirely uncultivated, and covered with grass jungle, scarcely a tree being visible. To the north and east, villages are seen; and in the distance, to the north, in a corner under the hills, lies the capital, Manipur. Here the country is well wooded, and more populous than in any other part. Several rivers from the north and west enter the Logták Lake, from which one river emerges. This stream,

uniting with others, flows from the valley to the south. The general shape of the valley is that of an irregular oval; its length is about 36 miles, and its greatest breadth about 20. The ground falls from the north, where the capital is situated, towards the Logták Lake, to the south and south-west of which it again rises. The conformation is that of a shallow saucer, the lowest part of which is the lake.

The universal prevalence of dense forests in the mountain ranges has restricted geological observations to those portions which have been laid bare by the action of torrents, or to some few of the more conspicuous peaks and ridges. In that portion of the tract which extends between Manipur and Cachar, a light and friable sandstone, of a brown colour, and a red ferruginous clay are found to prevail on the lower heights. On reaching the more lofty elevations, these are succeeded by slate of so soft and friable a nature as in many instances to be little more than an indurated clay; it is distinctly stratified in very thin layers, which generally dip slightly to the southward. Petrifactions of the different species of woods growing on the borders of the rivers and streams are numerous. Among the central ranges west of Manipur, limestone has been found.

The rocks on the hills between Manipur and the Kubo valley are, on the Manipur side, composed of different varieties of sandstone and slate, more or less compact in structure; on the Kubo side, hornblende and ironstone are found, with large quantities of fuller's earth, which is dug from the ground not far from Moreh at the extreme south-east of the valley. North of Manipur, the rocks become more solid and compact; and the great central ridge, where the Gramei tribe dwells, is composed of hard grey granular slate, having about its base boulders of granite.

That coal of an inferior quality exists in the hills to the north-east of the Manipur valley is apparently certain, but the nature of the deposits is unknown. Iron, the only metal yet ascertained to exist in Manipur, is obtained principally from the beds of small streams south of Thobal and the hills near Langatel; it has also been found underneath the hills to the north, at a place called Kameng. Nearly the whole of the salt consumed by the Manipuris is obtained from salt wells situated in the valley, the chief of these being at the foot of the hills to the north-east, about 14 miles from the capital. The only important lake in the State is the Logták. This irregular sheet of water is of considerable size, but is yearly growing smaller.

The opinion of intelligent observers as to the formation of the Manipur valley is, that in former ages it consisted of a large lake basin, which has gradually contracted in size, until what remains of it is seen in the Logták. Other sheets of water exist in various parts of the valley, chiefly towards its northern extremity; but in no case, the Logták excepted, does any large stream drain into them.

The rivers of the valley are insignificant. They take their rise in the hills to the north and north-west, eventually falling into the Ningthi or Chindwin river in Upper Burma. The chief rivers crossed in the hills lying between Manipur valley and Cachar are the Jiri, the Mukru, the Barák, the Erung, the Lengba, and the Leimiták. The Jiri forms the boundary between British territory and Manipur, and is about 40 yards wide where it is crossed by the Government road; it is fordable in dry weather, and crossed by a ferry during the rains. The Mukru runs nearly parallel with the Jiri; it has a very clear stream, with a rapid current in the rains; during the dry season it becomes fordable. The BARAK is the largest and most important river in the Manipur Hill territory; it receives the Mukru, the Erung, the Tipái river, which flows north from the Lushái country, and finally the Jiri. It is said to be navigable for canoes for about one day above its junction with the Tipái. In dry weather the Barák is fordable, with the water thigh-deep. Almost all the rivers of Manipur are well stocked with fish, chiefly *mahsír*.

The whole of the hill ranges lying between the valleys of Cachar and Manipur, and far to the north and south, are densely clothed to their summits with tree jungle. Almost the only exceptions to this are the hill slopes facing the Manipur valley, which have been denuded of their timber. The forest trees are of great variety; and in the ranges lying west of the Manipur valley, there are large forest tracts comprising *nágeswar* (Mesua ferrea, *Linn.*), *jarúl* (Lagerstrœmia Flos-Reginæ, *Retz.*), india-rubber, *tun* (Cedrela Toona, *Roxb.*), oak, ash, etc. Fir-trees do not seem to exist in the hills immediately adjoining the Government road; they are, however, found in the Hirok range, and are common in the south. Bamboo jungle is everywhere plentiful. Towards the north, in the valleys dividing the hill ranges from one another, the forest trees attain immense sizes and heights; and where this kind of forest exists, the bamboo is uncommon. The tea plant is found wild in the Hirok range between Manipur and Burma, also on the hills to the north. Teak is common on the slope overlooking the Kubo valley. The only parts of the immense tracts of forest which are utilized, are those on the Jiri, and the hill slopes lying nearest to the capital.

In the valley, but few wild animals are found; in the hill territory, however, elephants exist in large herds, and the tiger, leopard, wild cat, and bear are found. Of deer, there is a variety of *sámbhar* (Rusa aristotelis) said to be peculiar to Manipur, the ravine deer, barking deer (Arvulus aureus), and a small red deer. The rhinoceros is found only in the hills to the east and south; the wild buffalo only in the south of the valley. The *metna* (Bos frontalis) or hill cow is now rare in a wild state, and is found in the south only; it is peculiar to the hills bordering

on the north-east frontier of India, and in shape resembles the buffalo, the horns being short, however, like those of the cow, and thick at the base. The wild goat is rare, the wild hog common. Flying lemurs are said to be not uncommon. There are two species of otters. The *huluk* monkey is found everywhere, and the *langúr* in the north. There are the usual varieties of game and other birds; black eagles have been seen, it is said, on the highest peaks.

Manipur appears to be singularly free from poisonous snakes. The cobra does not seem to exist in the valley, but the boa-constrictor is found in the dense forests to the south, and is said frequently to attain a large size. The marshes in the vicinity of the Logták also afford a retreat to serpents of a formidable size. Other places in the valley are infested by the serpent tribe; some of them are exceedingly active and bold, as the *tanglei*. This snake is fond of ascending bamboos, along the branches of which it moves with great velocity; if enraged, it throws itself from an extraordinary height upon the object of its anger. The bite is said to be mortal. This, added to its great activity and fierceness, makes the *tanglei* an object of much terror.

History.—The origin of the Manipurí people is obscure; and the written records, having been mainly composed since they became Hindus, are not worthy of much credit. From the most trustworthy traditions, the valley appears originally to have been occupied by several tribes, which came from different directions. Although the general facial characteristics of the Manipurís are Mongolian, there is great diversity of feature amongst them, some showing a regularity approaching the Aryan type. The kingdom of Manipur first emerges from obscurity as a neighbour and ally of the Shán kingdom of Pong, which had its capital at Mogaung. The regalia of the royal family are said to have been bestowed by King Komba of Pong. The history of Manipur contains nothing of special interest until about the year 1714 A.D. In that year a Nága named Pámheiba became Rájá of Manipur, and adopted Hinduism, taking the name of Gharíb Nawáz. His people followed his example, and since that date have been conspicuous for the rigidity with which they observe the rules of caste and ceremonial purity.

Gharíb Nawáz made several successful invasions into Burma, but no permanent conquest. After his death, the Burmese invaded Manipur; and the ruler, Jai Singh, having sought the aid of the British, a treaty of alliance was negotiated in 1762. The force sent to assist Manipur was, however, recalled; and after this, little communication passed between the British Government and the State for some years. On the outbreak of the first Anglo-Burmese war in 1824, the Burmese invaded Cachar and Assam, as well as Manipur; and Gambhir Singh of Manipur asked for British aid, which was granted. A force of Sepoys and artillery being sent towards Cachar, and a levy of Manipurís being

formed under British officers, the Burmese were not only expelled from the Manipur valley, but to the State was added Kubo valley down to the Ningthi river, situated to the east of the old boundaries of the State, and peopled by Sháns. In 1826, peace was concluded with Burma, and Manipur was declared independent. Until 1834, when Gambhir Singh died, the country remained quiet and prosperous. On his death, his son, the present Rájá, being at the time only one year old, Nar Singh, his uncle, and great-grandson of Gharíb Nawáz, was appointed regent. In 1834, the British Government decided to restore the Kubo valley to Burma, the Government of which had never ceased to remonstrate against its separation from that country. The valley was given back, and a new boundary laid down by an agreement dated 9th January 1834. The British Government at the same time bound itself to pay to the Rájá of Manipur an annual allowance of £637, in compensation for the loss of Kubo valley.

An unsuccessful attempt was made on Nar Singh's life in 1844, and the Rájá's mother, being implicated, fled with her son to Cachar. Nar Singh upon this assumed the Ráj, which he retained until his death in 1850. In 1835, a Political Agent was appointed to act as a medium of communication between the State and the British Government. On Nar Singh's death, Debendra Singh, his brother, was recognised as Rájá by the British Government. Three months afterwards, Chandra Kirti Singh, the present ruler, invaded Manipur; and Debendra Singh, who was unpopular, fled towards Cachar. Chandra Kirti Singh, having established his authority, was, in February 1851, recognised by the British Government. Since that time there have been many attempts on the part of other members of the royal family to head a rebellion; but all have been defeated, and their leaders either killed, imprisoned, or placed under surveillance in British territory. The last of these raids was perpetrated in 1866.

One of the most important events of recent years in the history of Manipur has been the loyal assistance rendered by the Mahárájá to the British Government in the Nágá war of 1879. The force furnished by him and led by the Political Agent, Colonel Johnstone, raised the siege of Kohima by the Nágás, and prevented a great catrastophe. In recognition of this service the Government of India bestowed upon the Mahárájá Chandra Kirti Singh the dignity of K.C.S.I.

In 1881–82, the boundary north of Kubo valley, between Burma and Manipur, was defined and demarcated. The raiding Kúkis, who were favoured hitherto in their enterprise by the uncertainty of the frontier, have been found to be settled within Manipur territory; and some of them (the Chasáds of Tonghu chief) have been induced to move farther in, and have thus been brought under stricter control. Another chief,

Thohowpa, with all his people, voluntarily immigrated, and in July 1883 took up his abode in Manipur State.

During the Burma expedition of 1885, which ended in the annexation of King Thebau's dominions, a small force under Colonel Johnstone, Resident at Manipur, succeeded in rescuing a number of British subjects and Europeans in Northern Burma.

Population.—In Manipur State, the counting for the Census of 1881 was not done in one day, but extended over a period of six weeks, the whole being concluded by the 17th February. The enumeration of Manipur valley, it is believed, was fairly done, and the results are, on the whole, as accurate as might be expected. The population of the hill tribes has been estimated from a list, believed to be pretty complete, of all villages, and the number of houses in each village, which is kept by the Manipur Durbar for the purpose of apportioning work to be done, or supplying coolie labour. The census of a certain number of villages was accurately taken, in the same manner as that for Manipur valley; and this showed that four persons, on an average, were to be found in each house, and that the males and females were equally balanced. Thus, for the Census of 1881, the population was estimated at 221,070, namely, 109,557 males and 111,513 females, scattered over 954 villages, and dwelling in 45,322 houses. The above figures represent 27 persons and 5·66 houses to the square mile, and show an average of 4·87 persons to a house.

Classified according to religion, the population consisted of—Hindus, 130,892; Muhammadans, 4881; hill tribes, 85,288; Buddhists, 2; and Christians, 7. The seven Christians consist of the Political Agent, his family, and one visitor. It is clear that the religion of the Manipurís is Hinduism; and this will probably always be the case, owing to the system which obtains, under which 'any hillman can become a Hindu, and any low-caste man rise in the social scale.' Muhammadanism in Manipur arose from Manipurí men having taken as wives Muhammadan women before the regular introduction of Hinduism. On the introduction of that religion, they, with their descendants, were obliged to become Muhammadans. The present Muhammadans are the descendants of the few who escaped being captured by the Burmese when they devastated the country and carried into captivity all sections of the Manipurí community. The Muhammadans are divided into four principal divisions — namely, Sepoys, gardeners, turners, and potters. They are under a Kázi, who is appointed by the Rájá for services rendered as a partisan or a menial servant, and not on account of his knowledge of the laws which ought to govern Muhammadans. This is attended with no inconvenience, as the whole of the Muhammadan population are ignorant of the creed they profess. The Manipurí Muhammadans

are industrious—'indeed the most industrious portion of the population of Manipur.'

As regards occupation, the Census distributes the population into the following six main groups:—(1) Professional class, including State officials of every kind and members of the learned professions—males 12,169, and females 2858; (2) domestic servants, inn and lodging-house keepers—males 7324, and females 7672; (3) commercial class, including bankers, merchants, carriers, etc.—males 572, and females 14,861; (4) agricultural and pastoral class, including shepherds—males 51,057, and females 52,880; (5) industrial class, including all manufacturers and artisans—males 2125, and females 917; (6) indefinite and non-productive class, comprising all persons of unspecified occupation, children, and general labourers—males 36,310, and females 32,325.

In classes 2, 3, and 4, the women outnumber the men. 'The women in Manipur, married or unmarried, are not confined in *zanánas*, as in Bengal and Hindustan; all classes are alike in this respect; neither do they cover their faces before strangers. They are very industrious; in this respect the opposite of the men, who are lazy and indolent. Most part of the work of the country, except the harvest, is performed by them, and they are consequently the mainstay of the family circle. All marketing is done by women; as well as all the work of buying, selling in public, and the carrying to and fro of the articles to be sold. At home they are busily employed in weaving and spinning. It would be difficult to find a more industrious woman in India than the Manipurí.' The commercial class of the Census, representing 6·98 per cent. of the population, are nearly all women, of whom 14,770 keep shops or stalls, and 91 are boat-women.

Although the people of the Manipur valley profess chiefly Hinduism, they have not given up their ancient worship, and above 300 deities are still propitiated by appropriate sacrifices of things abhorrent to real Hindus. They have a caste system which differs from that of Bengal in some respects, and seems to be chiefly founded on what is known as the system of *lallúp* or forced labour. This is based on the assumption that it is the duty of every male between the ages of seventeen and sixty to place his services at the disposal of the State for a certain number of days in each year. To different classes of people, different employments are assigned; thus there are four great divisions—Laiphum, Káphum, Ahullúp, and Niharúp, which are again subdivided. There are eight principal castes, the principal being the Kshattriya caste, to which the bulk of the Manipurís profess to belong. The Loi or 'subdued' caste are the most hard-working and useful people in the valley. The Lois have a separate language, and one village of them, called Sengmai, speak a language only understood by themselves. This language is said to have an affinity with the Burmese. The hillmen who

inhabit the mountainous tract of country under Manipur rule, although amongst themselves divided into innumerable clans and sections, with slight differences in language, customs, or modes of dress, may be considered generally under the two great divisions of Nágá and Kúki.

Although no sharp boundary can be drawn between the tracts of country occupied by these two races, it may be said that the Nágás are principally found to the north, and the Kúkis to the south, of a line running east from Cachar to the Manipur valley in about 24° 70′ N. lat., or about a day's journey south of the Government road from Cachar. There are several well-marked distinctions between the races. The Nágás wear their hair cut in various ways, sometimes very short; the Kúkis, on the other hand (with one exception, the Chiru clan), wear their locks long, and tucked in behind. The Nágá wears no *pagri* or head-covering on ordinary occasions; the Kúki (again excepting the Chirus) always does. The ear ornaments of the Nágás are various; the Kúki generally confines himself to a single red pebble bead, suspended from the lobe by a string or two large discs of perforated silver with a broad flange, by which the holes in the ears are often enormously distended. This ornament is confined to the Kúkis, and is never seen among the Nágá tribes.

The Maring Nágás, a race differing essentially from the Nágás to the north in facial and other characteristics, are distinguished by wearing the hair long, and confined in a bunch like a horn, rising from the front of the head.

The purely Mongolian caste of features is rare among these hill tribes, although the peculiar oblique eye is perhaps the most persistent characteristic, being found in the Manipurís as well as the hillmen. Amongst both Nágás and Kúkis the stature varies considerably, the Nágás being generally the taller of the two. The languages of these two races are entirely different; and among the hillmen in Manipur territory, or on its borders, there are said to be upwards of twenty different dialects. The hill tribes all recognise one supreme being of a benevolent nature, and numerous inferior deities and evil spirits inhabiting the inaccessible heights. They all seem also to believe in a future state, though their ideas on the subject vary greatly. Marriage is entered upon by both sexes after they have arrived at puberty, and is a matter of inclination on both sides, as a rule. Adultery is considered a very heinous offence, and is punished with death to the male offender, the woman escaping without punishment. Polygamy is but rarely practised; polyandry is quite unknown.

In the hills, *júm* cultivation is common. The rice crop, which forms the staple food of the population, is ready for cutting about September. The crop having been cut, is beaten out on the field, and the grain deposited in the granary close by the village. In the carrying the

whole village joins, receiving as recompense a certain portion of the load carried, and their drink. The crops raised in the hill territory comprise rice, cotton, oil-seeds, pepper, tobacco, ginger, vegetables of various kinds, sweet potatoes of a superior quality, Indian corn, etc. In the valley, no fewer than nineteen varieties of rice are grown; these may be divided into early crops, cut about September, and late crops, cut in November. Several kinds of pulse are grown, as well as English and other vegetables. Wheat is grown in the cold season in small quantity, and thrives very well. Plantains, pine-apples, and mangoes are cultivated; and plums, peaches, and apples are also grown, but of inferior quality. Throughout the valley and neighbouring hills, the bramble and wild raspberry are common. English fruit-trees have been lately introduced, with a view to their acclimatization. Dogs are seldom kept, being looked upon as unclean; but they are eaten as a delicacy by some of the Nágá tribes in the hills.

The breed of ponies is similar to that of Burma; they are generally small, under 12 hands high, but strong and hardy. The game of hockey on horseback was formerly almost peculiar to Manipur, but has now become popular in India and England under the name of polo. In Manipur, seven players on each side are the number usual in an important match. In some of these matches, particularly those which follow the yearly boat races in September, great interest is taken, and the scoring is carried on from year to year. In the first day's game, a member of the royal family usually heads either side. A good polo pony is very valuable. As it was found that the ponies were deteriorating from want of care in breeding, more pains are now being taken in this respect, and the export of stallions and mares has recently been prohibited.

The land system starts from the assumption that all the land belongs to the Rájá, and is his to give away or retain as he pleases. The headman of each village looks after the cultivation, and is responsible for the realization of the tax payable in kind by each cultivator; he holds no interest in the land, and is merely an agent of the Rájá. The mode of cultivation differs little from that of Eastern Bengal. The soil throughout the valley is nearly all of excellent quality, and of great depth. It is a blackish loam near the hills; but on the hills themselves it is reddish, and of inferior quality.

Communications.—The chief road is that leading from Manipur to the District of Cachar, which was constructed by the British Government after the first Anglo-Burmese war between 1832 and 1842, and was kept in repair by it until 1865, when, by mutual arrangement, the maintenance was undertaken by the Manipur Rájá. It has been recently repaired, and is said to be in good condition, and in a fit state for pack-bullocks in the cold weather. Another trade route leads into Cachar

to the north of the Government road, known as the Aquí route; it is still used, though not frequently, by the hill people. The valley is well supplied with tolerable roads, which, though not metalled, are quite fit for the traffic of the country. The chief difficulty in road-making is the bridging of streams, for which the rough and ready methods of the Manipurís are good in ordinary weather, but the bridges generally require repair yearly after floods. A good bridle road was constructed in 1883 from Manipur to Máo, the extreme northerly outpost of the State, and about 18 miles from Kohíma, the head-quarters of the Nágá Hills District.

Commerce.—The trade is small in amount, owing chiefly to the want of means of transport; none of the roads are fitted for carts, and could not be made so except at great expense. The internal trade of Manipur is carried on by means of numerous open *háts* (markets) at various intervals along the main roads. The sellers at these *háts* are almost exclusively women. Vegetables, fish, cloth, and sweetmeats are the principal articles sold. Rice is rarely seen at these places, as each family grows just enough for its own consumption. The chief medium of exchange at these markets is the small coin called *sel*, weighing about 16 grains, made of bell-metal at the Manipur mint, of which six go to the pice. The British and Burmese rupee both representing the same value, and smaller silver of the Indian mint, are also commonly used; but the *sel* is the only copper coin of the markets. The chief imports from Cachar consist of areca-nuts, calicoes, broadcloths, brass vessels, hookahs, tobacco, spices, tools and implements, woollen manufactures, and various small articles of luxury. The principal exports are ponies, cloth, silk, hockey sticks, beeswax, tea seed, ivory, and india-rubber. A small trade is carried on with the Nágá Hills, in which ponies, iron, spirit, salt, and cloth are exported, and brass vessels and carnelians are imported. Beeswax, oilseed, cotton, and cloths are also brought in by different tribes. The trade with Burma, which on account of the unsatisfactory condition of frontier affairs had of late years been very small, is now (1885) at a standstill. The passes are closed, and intercourse between the two countries has ceased. With the recent annexation of Upper Burma, it is hoped that commercial intercourse will be soon reopened.

Administration.—Apart from payments in kind, the money revenue of the State, including the compensation of £637 a year, paid by the British Government for the surrender to the Burmese of the Kubo valley, is estimated at from £5000 to £6000 annually from all sources. Manipur pays no tribute to the British Government.

There are two chief courts of justice, the Chirap and the Military Court. The Chirap consist of 13 senior members, all of whom are appointed by the Rájá. The military court consists of the 8 senior

officers of the army, named generals, colonels, and majors, and other officers. In this court, all cases in which sepoys are concerned are heard. There is also a court called Paja, or women's court, in which all cases of family dispute in which women are concerned, wife-beating, adultery, etc., are in the first instance heard; serious cases may afterwards come before the Chirap. There are also minor courts for cattle disputes, etc. Species of village clubs under the head of the village adjudicate in minor cases; and in the event of a villager falling into extreme poverty, they supply him with food; in sickness, they look after him; and in the case of his death, provide wood, etc. for his cremation. In this way, although many of the inhabitants are very poor, actual starvation or fatal neglect is rendered impossible. The jail is situated within the Rájá's enclosure, and is calculated to contain 100 prisoners, who are freely employed on the roads, etc. outside. The punishments most in vogue, especially in cases of assault and theft, consist of flogging and exposure in the *bázár*.

The military force of Manipur consists of a species of militia, who are liable to be called out for service when required. Their numbers in 1883-84 are put at 5349 infantry, 501 artillery, 400 cavalry, and 700 Kúki irregulars. The Manipur troops, when formed into a levy under British officers in 1825, and the following years, did good service against the Burmese. In 1835, the British support in pay was withdrawn from the force constituting the Manipur levy.

A school was established a few years ago in Manipur, at the suggestion of the Political Agent, and is fairly well attended. Some of the highest officials can neither read nor write. The Manipurís possess a written character of their own, which seems to be a modification of the Nágari; but of late years, the Bengáli character has entirely superseded it. A regular post-office was established at Manipur in 1882-83, with excellent results. Besides the convenience to the public, the treasury had benefited in 1883-84 by the issue of money orders to the amount of £3045, and it is no longer necessary to make remittances to pay the establishment at Manipur; while the post-office has earned an average monthly income of £7, 10s. The dispensary in 1883-84 treated 7014 Manipurís and 886 persons belonging to the hill tribes.

Medical Aspects.—The Manipur valley, being 2500 feet above the sea, enjoys a temperate climate. The following is the average monthly temperature at 3 P.M. throughout the year 1868-69:—January, 64° F.; February, 75°; March, 76°; April, 80°; May, 79°; June, 83°; July, 81°; August, 82°; September, 81°; October, 78°; November, 71°; December, 65° F. At the hottest season, the nights and mornings are always cool. In the cold weather, fogs are common in the valley. Hoar-frost is usual, but ice does not form on the pools. The rainfall in the valley was 36·74 inches in 1872-73, when there was a general

complaint of superabundance; but in 1876–77, the registered rainfall was 46·24 inches; in 1877–78, 54·30 inches; and in 1883–84, 74 inches, when the rice crop suffered severely. The prevailing wind is from the south-west, and blows with remarkable steadiness, seldom varying all the year round. The valley is much subject to slight earthquakes, but, except in 1869, there has been no serious convulsion of this kind so far as is known.

Manjadikara.—Trading town in Travancore State, Madras; situated in lat. 9° 26′ N., and long. 76° 35′ E., between Madura and Kotáyam. Population (1871) 6572; number of houses, 1293. Not returned separately in the Census Report of 1881.

Manjarábád (*'Abode of Fog'*).—*Táluk* in Hassan District, Mysore State, with head-quarters at Sakleshpur. Area, 457 square miles, of which 85½ are cultivated. Population (1871) 69,817; (1881) 52,555, namely, 27,408 males and 25,147 females. Hindus numbered 50,386; Muhammadans, 1469; Christians, 699; and Jews, 1. Land revenue (1881–82), exclusive of water rates, £12,199, or 4s. 5d. per cultivated acre. In 1883 there were 8 police circles (*thánás*) and 1 criminal court; regular police, 67 men. Revenue, £15,140.

A wild tract below the Western Gháts, which has always enjoyed an independent history. Originally called Balam, or 'Strong,' it is said to have been colonized by the Vijayanagar monarchs in the 14th century. To them is attributed the institution of the *patels* or headmen, who still retain hereditary feudal powers. In 1397 the country was made over to a line of *pálegárs*, who maintained their authority until the beginning of the present century. The last of the dynasty, Venkatádri Náyak, attempted to extend his territory after the capture of Seringapatam by the British in 1799; two years later, he was captured and hanged. The *táluk* is divided into 4 *náds*, and subdivided into 28 *mandes*. Over each *mande* is a head-man; and the foremost six of these, the *patels*, who also preside over the *náds*, are persons of great local influence. Their houses are generally fortified, and within their walls they exercise many of the attributes of a mediæval baron.

In physical appearance and in dress, the inhabitants present a marked contrast to the people of the low country. They always go armed with a matchlock and a knife. The hills of Manjarábád afford some of the most beautiful scenery in India. Forests of magnificent timber are broken by green glades, and overhung by precipitous rocks. The soil is fertile, and rice is grown in abundance on the terraced slopes of the valleys. Coffee was introduced about a quarter of a century ago; there are now 175 estates in the *táluk* owned by Europeans, occupying 15,328 acres, with a revenue of £872, and 12,446 native holdings, covering 24,064 acres, with a revenue of £1277. Expenditure on *tahsíl* administration in 1881–82, £1375.

Manjeri.—Town (more correctly a group of hamlets) in Ernád Sub-division, Malabar District, Madras Presidency. Lat. 11° 6′ 30″ N., long. 76° 9′ 50″ E. Population (1881) 8944; number of houses, 1717. Hindus number 4523; Muhammadans, 4389; and Christians, 32. Notable as the scene of one of the worst Máppillá outrages in 1849. The native troops sent against the fanatics were routed, and their officers killed; and it was not till European troops were brought up that the rising was suppressed. Contains courts, dispensary, etc.

Mánjhand.—*Táluk* in the Sehwán Sub-division of Karáchi District, Sind, Bombay Presidency; situated between 25° 48′ and 26° 19′ N. lat., and between 67° 53′ 30″ and 68° 21′ E. long. Area, 581 square miles, containing 1 town and 28 villages. Population (1872) 18,551; (1881) 18,952, namely, 10,419 males and 8533 females, occupying 2747 houses. Hindus numbered 2453; Muhammadans, 15,352; Sikhs, 1082; aboriginal tribes, 52; and Christians, 13. Total revenue (1881–82), £5096. The area under actual cultivation in 1882–83 was 22,317 acres; assessed to land revenue, 24,300 acres. In 1884 the *táluk* contained 2 criminal courts; police stations (*thánás*), 7; regular police, 33 men.

Mánjhand.—Town in Mánjhand *táluk*, Karáchi District, Sind, Bombay Presidency; situated in lat. 25° 54′ 45″ N., and long. 68° 16′ 30″ E., close to the Indus, 88 feet above sea-level, 43 miles north of Kotri, and about the same distance south of Sehwán. Head-quarters of a *múkhtiárkár;* containing the usual public buildings, school with 134 pupils in 1883–84, post-office, etc. Population (1881) 2654; municipal revenue (1881–82), £131. Manufacture of coarse cloth and shoes. Station on the Sind, Punjab, and Delhi Railway.

Manjhanpur.—South-western *tahsíl* of Allahábád District, North-Western Provinces; comprising the *parganás* of Karári and Atharban, and consisting of an alluvial strip of upland in the Doáb, lying along the north bank of the Jumna, and much cut up by ravines leading down to the river.

Area of the *tahsíl*, according to the latest official statement (1881), 273·7 square miles, of which 176·9 square miles are cultivated, 39 square miles cultivable, and 57·8 square miles uncultivable. Population (1872) 116,217; (1881) 120,283, namely, males 60,216, and females 60,067; increase in the nine years, 4066, or 3·7 per cent. Classified according to religion, there were in 1881—Hindus, 108,221; Muhammadans, 12,062. Of 269 villages, 187 had less than 500 inhabitants, and only 2 upwards of 3000. Land revenue (1881), £23,826, or including local rates and cesses levied on the land, £27,877. Amount of rent, including local cesses paid by cultivators, £38,751. Among the proprietors in *parganá* Karári, the

Christians, 4022; and 'others,' 187. The *táluk* in 1883 contained 1 civil and 3 criminal courts; police stations, 7; regular police, 91.

revenue of the *parganá*. The cultivators nearly all belong to Hindu castes. Atharban is a Rájput *parganá*. In their own villages, the Rájputs cultivate largely with their own hands, or else sublet their fields at high rates to men of the recognised agricultural castes. In 1883, Manjhanpur *tahsíl* contained 1 civil and 1 criminal court; with 3 police stations (*thánás*), a regular police force numbering 45 men, and a village watch of 291 *chaukídárs*.

Manjhanpur-Pata.—Town in Allahábád District, North-Western Provinces; situated 31 miles west of Allahábád city, in lat. 25° 31′ 12″ N., and long. 81° 25′ 12″ E. Population (1881) 3143, the principal inhabitants being Baniyás and Musalmáns of the Shiá sect. Bi-weekly market on Mondays and Fridays. Imperial post-office, police station, and Anglo-vernacular school.

Mánjhi.—Town and police station in Sáran District, Bengal, on the Gogra (Ghagrá). Lat. 25° 50′ 10″ N., long. 84° 37′ 20″ E. Population (1881) 6068, chiefly engaged in river traffic. Hindus number 5059, and Muhammadans 1009.

Manjhia.—Town in Hardoi District, Oudh; situated 4 miles south-east of Piháni, on the road to Gopámau. A prosperous little trading village of 542 houses, with bi-weekly market. Population (1881) 3910. Village school. The population principally consists of Chamárs, but the proprietors are Chauhán Rájputs.

Mánjira. — Old village site in the Melghát division of Ellichpur District, Berar; nearly opposite to which, on the face of a hill to the west of the valley, are two small rock-cut temples or monasteries. One of these is completely closed up with rubbish, but the other is accessible by a short flight of steps leading to a low doorway. It is about 16 feet square inside, and 7 or 8 feet high; 2 rows of square pillars, roughly hewn, extend inwards, those of the inner row being only half finished. On the plateau, not far off, is a never-failing spring of excellent water, received in a rock-cut basin about 5 feet square and 6 feet deep. Underneath the basin, the rock has been cut away, rude pillars only being left as supports. Two similar reservoirs in the immediate neighbourhood are choked up.

Mankápur.—*Parganá* and village in Gonda District, Oudh.—*See* MANIKAPUR.

Mánkapur.—Town in Unao District, Oudh; situated on the road from Baksár (Buxar), 2 miles north of Bhagwantnagar, and 27 miles south-east of Unao town. Population (1881)—Hindus 1726, and Muhammadans 231; total, 1957, residing in 507 mud huts. Founded by a Bais chief, Mán Kewal Khás, about 600 years ago. No market or fair, but a little goldsmiths' and carpenters' work is carried on.

tahsíl administration in 1881–82, £1375.

the Indo-European Telegraph Establishment are also resident here. Manora contains European and Eurasian schools, church (St. Paul's, built in 1864–65), library, billiard-room, etc. An annual fair is held in March in honour of a *pír* or saint, said to be buried here under miraculous circumstances. Manora hill is a very healthy place, and an occasional resort for invalids from Karáchí; it is 100 feet high at its east end, descending to 40 feet at the west end. At the distance of 2310 feet to the east of Manora is a breakwater, which forms the protection of the entrance to the harbour in that direction. At the north end of this breakwater is the landing-place, with three jetties on the island of Kiamári, the Commissariat, the Passenger and the Customs jetty. About 3 miles from the jetties, towards the Frere Statue, on the right of the railway line, is an island on which is a meteorological observatory.

Manori.—Port in Thána District, Bombay Presidency. Lat. 19° 12′ 30″ N., long. 72° 50′ E. Situated 5 miles from Borivli station on the Bombay, Baroda, and Central India Railway. The town contains a Portuguese church to Our Lady of Help, built in 1559; burnt by the Maráthás; and rebuilt in 1815. Average annual value of trade for five years ending 1881–82—imports, £5869; and exports, £11,275. In 1881–82, the imports were valued at £5092, and the exports at £14,911. Manori is one of the six ports included in the Ghorbander Customs Division.

Mánkur.—Town in Bardwán District, Bengal. Lat. 23° 25′ 40″ N., long. 87° 36′ 30″ E. Station on the chord line of the East Indian Railway, 90 miles distant from Calcutta. Seat of considerable trade. Annual fair in January.

Manmád.—Town in the Chándor Sub-division of Násik District, Bombay Presidency; situated in lat. 20° 14′ 50″ N., and long. 74° 28′ 40″ E., on the Jabalpur or north-eastern line of the Great Indian Peninsula Railway, 45 miles north-east of Násik town. Manmád is the junction station of the Dhond and Manmád State Railway with the Great Indian Peninsula Railway. Much cotton from Khándesh and Malegáon takes rail here. Population (1881) 4137. Post-office, and school with 77 scholars in 1883–84. A remarkable pyramidal hill near Manmád, about 750 feet high, is notable for a tall, obelisk-like rock, at least 60 feet high, at the top of it; at the back of this hill are the peaks known as Ankai and Sankai.

Mannárgudi. — *Táluk* in Tanjore District, Madras Presidency. Area, 284 square miles. Population (1871) 161,264; (1881) 181,650, namely, 88,213 males and 93,437 females; town, 1; villages, 299; houses, 31,647. Hindus number 169,069; Muhammadans, 8372; Christians, 4022; and 'others,' 187. The *táluk* in 1883 contained 1 civil and 3 criminal courts; police stations, 7; regular police, 91.

revenue of the *parganá*. The cultivators nearly all belong to Hindu castes. Atharban is a Rájput *parganá*. In their own villages, the Rájputs cultivate largely with their own hands, or else sublet their fields at high rates to men of the recognised agricultural castes. In 1883, Manjhanpur *tahsíl* contained 1 civil and 1 criminal court; with 3 police stations (*thánás*), a regular police force numbering 45 men, and a village watch of 291 *chaukídárs*.

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Mánjhi.—Town and police station in Sáran District, Bengal, on the Gogra (Ghagrá). Lat. 25° 50′ 10″ N., long. 84° 37′ 20″ E. Population (1881) 6068, chiefly engaged in river traffic. Hindus number 5059, and Muhammadans 1009.

Manjhia.—Town in Hardoi District, Oudh; situated 4 miles south-east of Piháni, on the road to Gopámau. A prosperous little trading village of 542 houses, with bi-weekly market. Population (1881) 3910. Village school. The population principally consists of Chamárs, but the proprietors are Chauhán Rájputs.

Mánjira. — Old village site in the Melghát division of Ellichpur

Sáwantwári.

Manoli.—Town in Belgáum District, Bombay Presidency; situated 42 miles east of Belgáum town, and 6 miles north-west of Hubli, in lat. 16° 16′ N., and long. 74° 40′ E. Population (1881) 4621. There is a considerable industry in dyeing yarns. Manoli is famous as the spot where General Wellesley, afterwards Duke of Wellington, overtook the notorious freebooter Dhind-deva Wágh (better known as Dhundia), after a long pursuit from the Mysore territory. The freebooter with his followers had encamped on the banks of the river Málprabha, opposite the town, where he was surprised by General Wellesley at the head of a body of cavalry. Post-office. The town contains 8 temples dedicated to Panchalinga-Deva, built of coarse-grained stone, without any remarkable carving.

Manora.—Cape in Karáchí (Kurrachee) District, Sind, Bombay Presidency, and lighthouse, with a fixed light 120 feet above sea-level, and visible upwards of 17 miles, but only from 7 to 9 miles during the south-west monsoon. Lat. 24° 47′ 15″ N., long. 67° 1′ E. Manora forms one of the quarters of the Karáchí municipality, and is the station of the Master Attendant, who lives in the fort, which is said to have been built in 1797. The Port and Pilot Establishments, the Superintendent of the Harbour Improvement Works, and a portion of

the Indo-European Telegraph Establishment are also resident here. Manora contains European and Eurasian schools, church (St. Paul's, built in 1864–65), library, billiard-room, etc. An annual fair is held in March in honour of a *pír* or saint, said to be buried here under miraculous circumstances. Manora hill is a very healthy place, and an occasional resort for invalids from Karáchí; it is 100 feet high at its east end, descending to 40 feet at the west end. At the distance of 2310 feet to the east of Manora is a breakwater, which forms the protection of the entrance to the harbour in that direction. At the north end of this breakwater is the landing-place, with three jetties on the island of Kiamári, the Commissariat, the Passenger and the Customs jetty. About 3 miles from the jetties, towards the Frere Statue, on the right of the railway line, is an island on which is a meteorological observatory.

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Man-oung.—Island and town in Kyauk-pyu District, Arakan Division, British Burma.—*See* CHEDUBA.

Mánpur.—*Parganá* under the Bhopáwar Agency, Central India; originally formed part of the old Subah or Province of Málwá.

Situated on the top of the crest of the Vindhya range; bounded on the north, south, and east by Holkar's territory (Indore); and on the west by the Bhumiat of Jamnia, 12 miles south of Mhow. A peak near the eastern boundary of the *parganá*, 2899 feet above sea-level, was one of the Trigonometrical Survey Stations in the Vindhyas. Area, 71 square miles, containing 31 villages with 956 houses. Population (1881) 5239, of whom 2730 were Hindus, 2295 Bhíls, 203 Muhammadans, and 11 Jains.

The *parganá* is picturesquely placed, looking out over the valley of the Narbadá (Nerbudda). The Vindhyas temper the storms of the,
the 25 villages comprising the *parganá*, 15 are held in *zamíndárí* tenure, 1 in *tálukdárí*, and 9 in imperfect *pattidárí*. The Chauháns hold the proprietary right of 4 villages; the Chaudhári Gaurs, 6; Gautamas, ½ a village; Sayyids, 4; Patháns, 3½; Bráhmans, 4; Káyasths, 2; and Government, 1. Tillage is fair, especially in the Chauhán villages, whose proprietors are industrious and enterprising. Wheat, barley, and millet are the chief crops, and occupy more than three-fifths of the cultivated area. Gram, *bájra*, and *más* occupy more than another fifth;

little cotton is grown; the cultivation of poppy for opium is commencing. Exports are opium, *ghí*, seeds, molasses; imports, cloth, spices, sugar, etc. Grain is exported when prices rise in neighbouring States. Tigers have died out of the *parganá*, but other game abounds. Average annual rainfall, 45 inches.

The *parganá* came into British possession by the treaty with Gwalior of November 1860. Previous to British supremacy in these parts it had lain desolate for upwards of thirty years. It is now under the Agent to the Governor-General for Central India; and the Deputy Bhíl Agency had till 1882 its head-quarters at the chief town, Mánpur. At the close of 1882, the Deputy Bhíl Agency was amalgamated with the Bhopáwar Agency. Land revenue, £570. There are 4 schools, with an average daily attendance of 80 pupils. The dispensary at Mánpur in 1882–83 treated 2907 patients; vaccinations, 129. The Agra-Bombay trunk road, which passes through the region, has greatly developed both agriculture and trade. Population of Mánpur town (1881), 1522. About two miles south of the town are some caves.

Mánsa.—Native State within the Political Agency of Mahi Kántha, in the Province of Gujarát, Bombay Presidency. It is situated in the Sábar Kántha division, and is surrounded by the Gáekwár's territory. Population (1872) 11,893; (1881) 13,299. The principal agricultural products are millet, pulse, and wheat. The chief is descended from the Chaura dynasty, one of whom founded Anhilwára Pátan in 746–942 A.D. On the downfall of the house of Pátan, an assignment of land appears to have been given to the ancestors of the chief of Mánsa, but the date cannot be ascertained. The present (1881–82) ruler is Thákur Ráj Singhjí, a Hindu of the Chaura Rájput caste. He manages his estate in person, and enjoys an estimated gross yearly revenue of £4600. A tribute of £1175 is paid to the Gáekwár of Baroda. The succession to the chiefship follows the rule of primogeniture. There is 1 school, with 256 pupils. Transit dues are levied in the State.

Mánsa.—Chief town of Mánsa State, Mahi Kántha Agency, Bombay Presidency. Lat. 23° 26′ N., long. 72° 43′ 10″ E. Population (1881) 7898, namely, 6930 Hindus, 319 Muhammadans, and 649 Jains. Mánsa has a large and wealthy community of merchants, and is considered the richest town in Mahi Kántha.

Presidency, and lighthouse, with a fixed light 120 feet above sea-level, and visible upwards of 17 miles, but only from 7 to 9 miles during the south-west monsoon. Lat. 24° 47′ 15″ N., long. 67° 1′ E. Manora forms one of the quarters of the Karáchí municipality, and is the station of the Master Attendant, who lives in the fort, which is said to have been built in 1797. The Port and Pilot Establishments, the Superintendent of the Harbour Improvement Works, and a portion of

Máo-beh-larkár.—Village in the Khási Hills, Assam; about 18 miles from Shillong, and 5000 feet above sea-level. Coal-beds are worked to a small extent, sufficient to supply the inhabitants of Shillong with fuel for domestic purposes. The word 'Máo' in this and other Khási names signifies 'stone' or 'monolith.'

Máo-don.—Petty State in the Khási Hills, Assam. Population (1881) 305. The presiding chief, whose title is *Sardár*, is named U Láh Singh. The natural products include millet, *tezpát* or bay-leaves, pine-apples, oranges, betel-nut, and chillies. Limestone is quarried, and coal has been found 400 feet above sea-level. There is a regular market here, for trade with Sylhet.

Máo-iong (or *Máo-yang*).—Petty State in the Khási Hills, Assam. Population (1881) 1651; revenue £31, chiefly from dues on lime-quarries. The presiding chief, whose title is *Siem*, is named U Jit Singh. The natural products include rice, millet, *soh-phláng* (an edible root), cotton, beeswax, and honey. Mats are manufactured, and lime is quarried.

Máo-phláng.—Mountain plateau in the Khási Hills, with a village of the same name 14 miles west of Shillong. Highest peak, 5931 feet above sea-level. The village is connected with Shillong by a good

Mansúrkota. — Village in Barhampur *táluk*, Ganjám District, Madras Presidency. Lat. 19° 17′ N., long. 84° 58′ E. Situated about three miles to the north-east of Gopálpur. Population (1881) 252; number of houses, 59. From this village GOPALPUR took its old name Mansúrkota. Under Muhammadan rule, Mansúrkota was once an administrative centre.

Mansúrnagar. — *Parganá* in Sháhábád *tahsíl*, Hardoi District, Oudh; bounded on the north by Alamnagar and Piháni, on the east by Gopámau, and on the south and west by South and North Sára. Area, 26 square miles, of which only 9 are under cultivation. Although backward, it is readily capable of improvement. The soil is generally good, though not so fertile as in the adjacent *parganás* of North and South Sára. Hogs, *nilgái*, and a few wild cattle infest the jungle, and damage the crops. The population numbers (1881) 7902, namely, males 4230, and females 3672; or only 304 persons per square mile, this being the most sparsely inhabited *parganá* in the District. Of the 25 villages comprising the *parganá*, 15 are held in *zamíndári* tenure, 1 in *tálukdári*, and 9 in imperfect *pattidári*. The Chauháns hold the proprietary right of 4 villages; the Chaudhári Gaurs, 6; Gautamas, ½ a village; Sayyids, 4; Patháns, 3½; Bráhmans, 4; Káyasths, 2; and Government, 1. Tillage is fair, especially in the Chauhán villages, whose proprietors are industrious and enterprising. Wheat, barley, and millet are the chief crops, and occupy more than three-fifths of the cultivated area. Gram, *bájra*, and *más* occupy more than another fifth;

little cotton is grown; the cultivation of poppy for opium is commencing. Exports are opium, *ghí*, seeds, molasses; imports, cloth, spices, sugar, etc. Grain is exported when prices rise in neighbouring States. Tigers have died out of the *parganá*, but other game abounds. Average annual rainfall, 45 inches.

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Manwan.—Village in Sítápur District, Oudh, and head-quarters of Manwan *parganá;* situated on the Saráyan river, 1 mile west of the Lucknow and Sítápur high road, and 4 miles south of Bári town. Population (1881) 1122. The village is of interest merely on account of its great antiquity. It is traditionally said to have been founded 5000 years ago by Rájá Mándháta, a monarch of the Ajodhya Solar race, but to have relapsed into jungle on his death. Subsequently, an Ahír settled on the eastern, and a Musalmán named Mustáfa Khán on the western, portion of the ruins, and rebuilt the old town, which received the name of Mánpur Mustáfábád. The remains of Rájá Mándháta's fort are still extant. It was apparently a massive structure, placed on high ground overlooking the river, covering an area of 30 acres. The old bricks are used by the natives for building purposes in the village.

Máo-beh-larkár.—Village in the Khási Hills, Assam; about 18 miles from Shillong, and 5000 feet above sea-level. Coal-beds are worked to a small extent, sufficient to supply the inhabitants of Shillong with fuel for domestic purposes. The word 'Máo' in this and other Khási names signifies 'stone' or 'monolith.'

Máo-don.—Petty State in the Khási Hills, Assam. Population (1881) 305. The presiding chief, whose title is *Sardár*, is named U Láh Singh. The natural products include millet, *tezpát* or bay-leaves, pine-apples, oranges, betel-nut, and chillies. Limestone is quarried, and coal has been found 400 feet above sea-level. There is a regular market here, for trade with Sylhet.

Máo-iong (or *Máo-yang*).—Petty State in the Khási Hills, Assam. Population (1881) 1651; revenue £31, chiefly from dues on lime-quarries. The presiding chief, whose title is *Siem*, is named U Jit Singh. The natural products include rice, millet, *soh-phláng* (an edible root), cotton, beeswax, and honey. Mats are manufactured, and lime is quarried.

Máo-phláng.—Mountain plateau in the Khási Hills, with a village of the same name 14 miles west of Shillong. Highest peak, 5931 feet above sea-level. The village is connected with Shillong by a good cart-road. The Welsh Calvinistic Mission has a settlement at Máo-phláng village under the Rev. Dr. Griffiths, a medical missionary, with a dispensary and hospital. A mission school has been established in the village, and others are stationed in the neighbourhood.

Máo-san-rám.—Petty State in the Khási Hills, Assam, on a mountain range of the same name. Population (1881) 1102; revenue, £33. The presiding chief, whose title is *Siem*, is named U Ramman. The natural products include millet, potatoes, turmeric, ginger, and honey. Mats are manufactured; and lime, coal, and iron are found. The highest peak of the mountain range is 5810 feet above sea-level, and coal is found at an elevation of 4000 feet.

Máo-thad-rái-shan.—Mountain range in the Khási Hills, Assam; highest peak, 6297 feet above sea-level.

Mápusa.—Chief town in Bárdez District, Goa, Portuguese territory. Lat. 15° 36′ N., long. 73° 52′ E. Situated about 8 miles north of Panjim. Population (1881) 10,286, dwelling in 2285 houses. Celebrated from ancient times for the great weekly fair of Fridays. Mápusa takes its name, according to some, from *máp*, measure, and *sa*, to fill up, that is, the place of measuring or selling goods. Mápusa is now one of the

nálá, 10 miles north of Hattá town. The Bundelá Rájás of Charkhári built the fort, which encloses a building called the Báradarí, where they resided when they visited Maráideh. Their game preserve or *ramná* is near the village. In 1860 they made over the place to the British in exchange for certain territory in Hamírpur District. Population

occasion a fair is held, which lasts five days. Besides the church, Mápusa contains six chapels, an asylum for the poor and destitute, town hall, and jail. To the west of Mápusa are military barracks, where a regiment was stationed from 1841 to 1874, when it was disbanded. The barracks are now occupied by the police force, post-office, and schools.

Márahra (or *Márhara*).—Town and municipality in Etah *tahsíl*, Etah District, North-Western Provinces. Lat. 27° 44′ N., long. 78° 36′ 45″ E. Spread over an extensive site, 12 miles north of Etah town. Population (1872) 9214; (1881) 9271, namely, Hindus, 4822; Muhammadans, 4441; and 'others,' 8. The Muhammadans form the most important section of the population, and have great influence throughout the District. One wide drained and metalled road intersects the town from north to south. The smaller lanes are narrow, tortuous, and undrained. There are two *bázárs*, both metalled and drained. Close to the town lies the suburb of Miyán-ke-basti, the principal Sayyid quarter, surrounded by high walls, with corner towers and gateways, and owned by the descendants of Sayyid Sháh Barkatullá, a Musalmán saint, whose tomb and a beautiful mosque at its side form the most attractive features of the town. Considerable trade in cotton and indigo-seed. Police station, post-office, *sarái*, and an Anglo-vernacular school. Municipal revenue in 1883–84, £429; from taxes, £403, or 10½d. per head of population within municipal limits.

Mará-marnái (meaning the 'dead' or old bed of the Mar-nadí river).—River of Assam, rising in the independent Daphlá hills, and flowing south into the Picholá river, a tributary of the Lohit branch of the Brahmaputra. The course of the Mará-marnái within British territory marks the boundary between the Districts of Darrang and Lakhimpur.

Marang Baru (or *Barágái*).—Hill on the edge of the plateau of Hazáribágh District, Bengal; situated in lat. 23° 32′ 45″ N., and long. 85° 29′ 45″ E., on the boundary line between Hazáribágh and Lohárdagá Districts. It rises 2400 feet above the valley of the Dámodar, 1300 feet above the Chutiá Nágpur plateau, and attains an extreme elevation above the sea of 3445 feet.

Mará (or 'dead') **Tísta.**—An old and now deserted river bed of the TISTA, a river of Bengal.

Marble Rocks.—On the banks of the Narbadá (Nerbudda) river in Jabalpur (Jubbulpore) District, Central Provinces.—*See* BHERAGHAT.

received the name of Mánpur Mustáfábád. The remains of Rája Mándháta's fort are still extant. It was apparently a massive structure, placed on high ground overlooking the river, covering an area of 30 acres. The old bricks are used by the natives for building purposes in the village.

Mársághái.—Town in Cuttack District, Bengal; situated in lat. 20° 24′ N., and long. 86° 37′ E., 23 miles from False Point Harbour. Connected with Cuttack city, 42 miles distant, by the KENDRAPARA CANAL, which drops into tidal waters at Mársághái. An extension of this canal for 15 miles farther towards False Point, as far as the Jambu

Marjáta (or *Kágá*).—Estuary in the District of Khulná, Bengal; situated in lat. 21° 44′ N., long. 89° 32′ E., two and a half or three leagues to the eastward of Pátní Island. It has a wide entrance, with the channel stretching from the land on the east side nearly south by west, and shoaling gradually from the land to three or three and a half fathoms outside. The Párbhánga Islands, two in number, lie 4 or 5 miles inside the entrance of the river; on the southernmost there is said to be a tank of fresh water. On the reefs bounding the channel

Margáo. — Town in Salsette District, Goa, Portuguese India. Lat. 15° 18′ N., long. 74° 1′ E. Population (1881) 11,794, dwelling in 2522 houses. Situated in a beautiful plain in the centre of Salsette District, on the bank of the Sal river, and about 16 miles south-east of Panjim. Margáo, according to tradition, was one of the early seats of the Aryan settlers of Goa, and the site of the chief *matha* or convent, whence its name *Mathagráma*, or the village of the convent, corrupted into Margáo. Though for some time exposed to the incursions of Muhammadans and Maráthás, Margáo was inhabited by many rich families. Of late many public and private buildings have been erected. Christianity was introduced into Margáo in 1560, and the first church was built in 1565. The Jesuits had in 1574 built a college, which was subsequently removed to Rachol, a village about 6 miles north-east of Margáo. Margáo contains town hall, Government schools, theatre, and asylum. The military barracks, built in 1811, were formerly occupied by a regiment; but at present by the police, a small military detachment, and the post-office.

Margrám.—Town in Rámpur Hát Sub-division, Bírbhúm District, Bengal. Lat. 24° 8′ 45″ N., long. 87° 53′ 30″ E.; situated about 4 miles south-east of Rámpur Hát town, and 20 miles due west of Bárhampur, near the Dwárká river. Population (1881) 6008, namely, Muhammadans 3203, and Hindus 2805. Silkworm-rearing is extensively followed; silk is also woven into *sárís* and pieces, and sent to Murshidábád for sale.

Mariádeh.—Village in Hattá *tahsíl*, Damoh District, Central Provinces; situated in lat. 24° 16′ N., and long. 79° 42′ E., on the Jogídábar *nálá*, 10 miles north of Hattá town. The Bundelá Rájás of Charkhári built the fort, which encloses a building called the Báradarí, where they resided when they visited Maráideh. Their game preserve or *ramná* is near the village. In 1860 they made over the place to the British in exchange for certain territory in Hamírpur District. Population

... lasts five days. Besides the church, Mapusa contains six chapels, an asylum for the poor and destitute, town hall, and jail. To the west of Mápusa are military barracks, where a regiment was stationed from 1841 to 1874, when it was disbanded. The barracks are now occupied by the police force, post-office, and schools.

Márahra (or *Márhara*).—Town and municipality in Etah *tahsíl*, Etah District, North-Western Provinces. Lat. 27° 44′ N., long. 78° 36′ 45″ E. Spread over an extensive site, 12 miles north of Etah town. Population (1872) 9214; (1881) 9271, namely, Hindus, 4822; Muhammadans, 4441; and 'others,' 8. The Muhammadans form the most important section of the population, and have great influence throughout the District. One wide drained and metalled road inter-

are cultivated, 81·3 square miles cultivable, and 32·6 square miles uncultivable waste. Population (1872) 205,373; (1881) 242,940, namely, males 123,575, and females 119,365. Total increase since 1872, 37,567, or 18·2 per cent. in the nine years. Classified according to religion, there were in 1881—Hindus, 230,376, and Muhammadans, 12,564. The majority of the agriculturists consists of Bráhmans, Rájputs, Koerís, Ahírs, and Chamárs. Of 668 inhabited villages in 1881, 509 contained less than five hundred, and only 1 town had upwards of 3000 inhabitants. Government land revenue, £32,238; or including local rates and cesses levied on the land, £36,785. Total rental paid by cultivators, £48,169. In 1884, the *táhsíl* contained 1 criminal and 1 civil court, with 2 police stations (*thánás*), a regular police force of 31 men, and a village police of 274 *chaukídárs*.

Mariáhu.—Town in Jaunpur District, North-Western Provinces, and head-quarters of Mariáhu *tahsíl;* situated in lat. 25° 36′ 8″ N., and long. 82° 38′ 40″ E. On the metalled road to Mírzápur, 12 miles south-west of Jaunpur town. Mariáhu consists of a long main street along the high road, and cultivation extends right up to the houses. Population (1881) 3821, principally Hindus, and nearly all agriculturists. The place was formerly celebrated for its weavers, but these have now migrated elsewhere. *Tahsíli*, *munsif's* court, Anglo-vernacular school, post-office, police station, and a military encamping ground. The market days are Tuesday and Friday. For police and conservancy purposes a small house-tax is levied, which realized £60 in 1882–83.

Máriáo.—Petty State in the Khási Hills, Assam. Population (1881) 3682; revenue, £12. The presiding chief, whose title is *Siem*, is named U Jí Singh. The principal products are rice, millet, Indian corn, and sugar-cane. Mats are manufactured.

Mariás, The.—A tribe or sub-division of lapsed Muhammadans in Assam. For an account of these curious people, see article ASSAM, *ante*, vol. i. p. 358.

Mársághái.—Town in Cuttack District, Bengal; situated in lat. 20° 24′ N., and long. 86° 37′ E., 23 miles from False Point Harbour. Connected with Cuttack city, 42 miles distant, by the KENDRAPARA CANAL, which drops into tidal waters at Mársághái. An extension of this canal for 15 miles farther towards False Point, as far as the Jambu

Marjáta (or *Kágá*).—Estuary in the District of Khulná, Bengal; situated in lat. 21° 44′ N., long. 89° 32′ E., two and a half or three leagues to the eastward of Pátní Island. It has a wide entrance, with the channel stretching from the land on the east side nearly south by west, and shoaling gradually from the land to three or three and a half fathoms outside. The Párbhánga Islands, two in number, lie 4 or 5 miles inside the entrance of the river; on the southernmost there is said to be a tank of fresh water. On the reefs bounding the channel leading to the Marjáta, in about lat. 21° 30′ N., the ship *Berkshire* was lost in 1771.

Márkandí.—Village in Chándá District, Central Provinces; situated in lat. 19° 41′ N., and long. 79° 52′ E., on the left bank of the Wainganga. The village derives its name from a beautiful group of temples which stand on a high bluff overlooking a bend in the river. This group comprises a monastery, built of purple stone, and is enclosed in a quadrangle, with entrances on three sides, and a row of cells along the fourth side. Among the ancient sculptures are several of warriors with sword or battle-axe, and bow and arrows, all wearing anklets. The centre temple is entirely covered with modern carving of rare excellence, consisting mainly of human figures about 2 feet high, and apparently representing scenes in a continuous tale. This temple has recently been seriously injured by lightning. The village of Márkandí is said to have been founded in the 14th century by Vyankat Ráo, a Gond chief of Arpallí; but, owing to the yearly inundations, it now contains only 25 houses. A fair held every February is not well attended. The islets in the river near Márkandí supply excellent stone for mills.

Márkápúr.—*Táluk* in Karnúl District, Madras Presidency. Area, 1110 square miles. Population (1881) 84,048, namely, 42,245 males and 41,803 females. Number of villages, 80; houses, 16,543. Hindus number 74,455, or 88·5 per cent.; Muhammadans, 4824; Christians, 4767; and 'others,' 2. In 1883, the *táluk* contained 2 criminal courts; police stations (*thánás*), 11; regular police, 70 men. Land revenue, £8332.

Marmagáo.—Peninsula, village, and port in Salsette District, Goa, Portuguese territory. The peninsula of Marmagáo is situated on the southern side of the harbour of Goa, on the left bank of the Zuárí river. It is connected with the mainland by a narrow strip of

was afterwards enlarged by the King of Burma in the middle of the 13th century. For some time after the capital was transferred to

..., which lasts five days. Besides the church, Mápusa contains six chapels, an asylum for the poor and destitute, town hall, and jail. To the west of Mápusa are military barracks, where a regiment was stationed from 1841 to 1874, when it was disbanded. The barracks are now occupied by the police force, post-office, and

and scrub.

The village and port of Marmagáo are situated at the eastern extremity of the peninsula, about five miles south of Panjím. Population of Marmagáo (1881) 1387, mostly Christians. In the last half of the 17th century, the Portuguese Viceroy, the Count of Alvor, resolved to abandon Goa, and to transfer the seat of the government to the peninsula of Marmagáo. In 1684–85, the foundations of a new capital were laid at Marmagáo, and the work progressed favourably. In 1686 the works were stopped by his successor. During the next fifteen years, orders were repeatedly received from Portugal to demolish the public buildings of Goa, and to apply the materials to the construction of new ones at Marmagáo, while the Viceroys were directed to transfer their residence to that place. During the Viceroyalty of Caetano de Mello e Castro, the works were pushed on with vigour, and several buildings were completed, among which may be mentioned the palace and hospital. The Viceroy himself resided at Marmagáo for a few months in 1703. Suddenly the works were stopped by the Royal letter of 8th March 1712. In 1739, when Goa was in danger of falling into the hands of the Maráthás, the nuns and other helpless portion of the population sought refuge at Marmagáo.

The Government buildings are now mere heaps of ruin. The only relic of importance is a fine old church. The fortress has been converted into a convict establishment. Marmagáo is to be the western terminus of the railway now under construction in Portuguese territory in continuation of the Southern Maráthá Railway system. In anticipation of the trade which, it is hoped, will be developed, measures are being taken to improve the harbour.

Maroli.—Port in Thána District, Bombay Presidency. Lat. 20° 18′ N., long. 72° 46′ E. Average annual value of trade for five years ending 1881–82—imports, £23, and exports, £812.

Marpha.—Ruined fort in Bánda District, North-Western Provinces. Formerly capital of a Bághel Rájá, tributary to the Panná princes; but the last of the line fell in the battle of Chachariya, about 1780, since which period the fort has fallen into decay. Afterwards occupied by predatory chieftains, whom Colonel Meiselback ousted in 1804. Four gates give access to the fort, and it contains several unpublished inscriptions.

Assam. For an account of these curious people, see article Assam, *ante*, vol. i. p. 358.

Március.—Town in Cuttack District, Bengal; situated in lat. 20° 24′ N., and long. 86° 37′ E., 23 miles from False Point Harbour. Connected with Cuttack city, 42 miles distant, by the KENDRAPARA CANAL, which drops into tidal waters at Mársághái. An extension of this canal for 15 miles farther towards False Point, as far as the Jambu mouth of the Mahánadi, was completed in 1883–84, and is regularly open for navigation by steamers and boats.

Martaban.—Township in the Tha-ton Sub-division of Amherst District, Tenasserim Division, British Burma; bounded on the west by the Bay of Bengal. Traversed from south-east to north-west and then north by a range of hills culminating in the Zin-gyaik peak, 3500 feet above sea-level. To the east of this main chain the country is forest-clad, and but little cultivated; on the west lie extensive and fertile plains, intersected by numerous streams and creeks, which afford an easy outlet for the large quantities of rice grown in the tract. The principal rivers are the Bhin-laung and Rin-gnyeim, flowing west to the sea, and the Da-rein and Ká-daing, tributaries of the Da-ray-bauk. The extreme west of Martaban township is, in parts, liable to damage from the entry of the sea-water through the various rivers; the south coast is protected from inundation by silt-covered sea-drift. The chief town is MARTABAN. The township, which, with Tha-ton and Pa-gat, was transferred from Shwe-gyin to Amherst District in 1865, contains 9 circles. Population (1881) 45,442; land revenue, £19,225; capitation tax, £4018; gross revenue, £25,233. In 1881–82, the area under cultivation was 95,215 acres, mostly occupied by rice. The agricultural stock consisted of 19,331 horned cattle, 455 goats, 967 pigs, 7902 ploughs, 2601 carts, and 1354 boats. Martaban township is the stronghold of the Talaing language. In several of its villages, Talaing is taught in the monasteries, and Burmese is almost unknown.

Martaban.—Small town in Amherst District, Tenasserim Division, British Burma; situated in lat. 16° 32′ N., and long. 97° 38′ E., on the right bank of the Salwín, immediately opposite Maulmain, between the river and a range of hills stretching up north-west, and crowned by white pagodas. Population (1881) 1781. For several years Martaban was the head-quarters of the township, and contained a court-house. There is a good circuit-house here, and below it a wooden wharf; on the bank of the Salwín is an ancient pagoda, the Mya-thein-dan, which has been recently repaired. In Martaban is an old bell with a Talaing (15th century) inscription by King Dhammaceti, the fellow of which was found on the platform of a pagoda at Maulmain. Martaban is said to have been built in 576 A.D., by Tha-ma-la, the first King of Pegu, and was afterwards enlarged by the King of Burma in the middle of the 13th century. For some time after the capital was transferred to

Pegu (1323), the seat of Government seems to have remained at Martaban. During the subsequent wars between the Peguans, the Siamese, and the Burmese, the place was several times besieged and captured; and was, on more than one occasion, the last stronghold of the reigning sovereign. The Portuguese historian, Manuel de Faria-y-Souza, describes it as being, in 1540, 'the metropolis of a great and flourishing kingdom;' but in stating that the treasure 'amounted to 100 millions of gold,' he gives a doubtless very much exaggerated account of its wealth.

Towards the end of the 16th century, Martaban was taken by the King of Siam, who appointed a governor over it and the surrounding country. Its history after this is somewhat obscure. It seems frequently to have changed hands; and during the 17th and 18th centuries was the seat of governors elected by the monarch, Peguan or Burmese, who happened to rule the country. In the first Anglo-Burmese war the place was besieged and taken (29th November 1824), and it figured again conspicuously in the second Anglo-Burmese war. It was captured on the 5th of April 1852, and an attempt made by the Burmese to recover it a few weeks later was frustrated.

Martolí.—Village in Kumáun District, North-Western Provinces, among the wild northern mountains; situated in lat. 30° 21′ N., long. 80° 13′ E., on the route to Hundes or Chinese Tibet by the Juhár Pass. Thornton states that the people, who are Bhutiyas, carry on a flourishing trade with Hundes. During the winter the whole population (909 in 1881) migrates to the lower valleys. Elevation above sea-level, 11,352 feet.

Marttan (or *Mártand*).—Ruined temple in Kashmír State, Northern India.—*See* MATAN.

Marúfganj.—Mart in Patná District, Bengal; the most important of the business quarters of PATNA CITY. Extensive river traffic. Imports—salt, rice, cotton, timber, and sugar; exports—wheat, barley, oil-seeds, *ghí*, and iron.

Márwár.—State in Rájputána. The modern name of the State is taken from that of the chief city, Jodhpur.—*See* JODHPUR.

Masan.—A tributary of the Little Gandak river, Bengal, rising in the Sumeswar range, close to Fort Sumeswar in Champáran District. It drains a large tract of country, receiving almost all the flood-water of the Dún. It only flows during floods and rains, and soon dries up when the rain ceases. Bed and banks, sandy.

Masár.—Village in Sháhábád District, Bengal; situated a little to the south of the East Indian Railway, about 6 miles west of Arrah. It has been identified with Mo-ho-so-lo of the Chinese pilgrim Hiuen Tsiang; and from his account must then have stood close to the Ganges, which now flows 9 miles to the north, traces of the high banks of its old channel

still, however, remaining. The old name of Masár, as proved by seven inscriptions in the Jain temple of Párasnáth, was Mahásará; but the original name was Sonitpur, famous as the residence of Banásar, whose daughter Ukha was married to a grandson of Krishna. There is a Jain temple here, with several Bráhmanical images. It bears an inscription dated 1386 A.D. Dr. Buchanan-Hamilton discovered some Buddhist idols in a heap of mud and bricks immediately west of the village, and assigns them to Cherús. The town contains 14 fine old wells and numerous tanks. The population of the old town has been estimated at about 20,000. At present it is only a straggling village, half a mile long by a third of a mile broad. A colossal image found at Masár was in 1882 removed to Arrah, and the fragments being pieced together, it was set up in the public garden at that place.

attention to the advantages of a sea-borne trade. Orme has mention of a tradition that the port was founded in the 14th century by the Arabs who may have rounded Ceylon during one of their ventures to Southern India. The first reliable date in Masulipatam annals is 1425 A.D., when the Hindu Rájás of the Karnátak, who were fighting the Muhammadan Báhmani kings of the Deccan by the aid of mercenary

Masjidkur.—In Jessor District, Bengal; site of an old mosque, still used as a place of worship, and attributed to Khán Jahán, the builder of the Sát-gambaz or 60-domed mosque in the same District. This ruined edifice has 9 domes and 4 towers at its 4 corners, the roof is supported by 4 pillars of greystone. Masjidkur (literally, 'The digging out of a mosque') lies in lat. 22° 28′ 45″ N., and long. 89° 19′ 30″ E., 6 miles south of Chándkhálí on the Kabadak; and was so called by the pioneers of cultivation in the SUNDARBANS, who came upon it while clearing away the jungle along the banks of the Kabadak.

Máskhál (*Máhesh Khál*).—Island lying off the south of Chittagong District, Bengal. Lat. (centre) 21° 36′ N., long. 91° 57′ E. Through the centre, and along the east coast-line, runs a range of low hills, of which Garamchori, 288 feet, is the highest; the west and north sides are fringed with a belt of mangrove swamps and creeks. There is a ferry under Government management, across Máskhál channel. The jurisdiction of the Máskhál police circle (*thánâ*) includes this island, and also that of Kutabdia.

In 1622, the English traders, driven by the Dutch from the Spice Islands, and also from Pulicat, succeeded in establishing their factory at Masulipatam. In 1628 they were driven out for four years, but they returned under a *farmán* from the Muhammadan king of Golconda, which is known as the 'Golden Firman.' The station

Másti.—Village in Málur *táluk*, Kolár District, Mysore State. Lat. 11° 52′ 30″ N., long. 78° 2′ 25″ E. Population (1881) 1612. Founded by a petty chief in the 16th century. Weekly fair on Wednesdays.

Masúda.—Town in Ajmere Sub-division, Ajmere-Merwára District, Rájputána. Lat. 26° 5′ N., long. 74° 32′ E. Estimated population, 4296. Distant from Ajmere city 29 miles. Chief town of the *parganá* of Masúda, and the residence of the *istimrárdár*. Water-supply good. Post-office and dispensary.

Masulipatam (*Machli-patnam*, or 'Fish Town.' This is the received etymology of the name, but according to Colonel Yule it is erroneous. He thinks that the coast is almost certainly the *Mæsolia* of the Greek geographers, and he believes the name to be a relic of that word).—Chief town and principal seaport of Kistna District, Madras Presidency. 215 miles north of Madras city, in 16° 9′ 8″ N. lat., and 81° 11′ 38″ E. long. Population (1871) 36,188; (1881) 35,056, namely, 16,831 males and 18,225 females, occupying 6971 houses. Hindus number

centuries was the seat of governors elected by the monarch, Peguan or Burmese, who happened to rule the country. In the first Anglo-Burmese war the place was besieged and taken (29th November 1824), and it figured again conspicuously in the second Anglo-Burmese war. It was captured on the 5th of April 1852, and an attempt made by the Burmese to recover it a few weeks later was frustrated.

from the fort on the sea-coast, which latter is called *Machli-bandar*, or 'fish port,' abbreviated by all classes into *Bandar*. The fort contains the barracks and arsenal, which have been suffered to fall into decay since the withdrawal of the garrison in 1865; the Protestant and the Roman Catholic churches. All round stretches an expanse of waste land, swampy in the rainy season, and deep with sand during the remainder of the year. About 2 miles to the north-west rise some sand ridges on which are the houses of the European residents. On a lower elevation stands the *pet* or native quarter, which is fairly well laid out with streets and brick houses. In this quarter is the site of the French factory—a patch about 300 yards square—still claimed by France. The road where the residents ride and drive long possessed an interesting memorial of former days in 'Eliza's tree,' so called from Mrs. Draper, the famous correspondent of Sterne. The tree was washed away in the great cyclone of 1864. In the centre of the native quarter, where two principal streets cross, there formerly stood a collection of upright slabs, exquisitely carved with figures in

It drains a large tract of country, receiving almost all the flood-water of the Dún. It only flows during floods and rains, and soon dries up when the rain ceases. Bed and banks, sandy.

Masár.—Village in Sháhábád District, Bengal; situated a little to the south of the East Indian Railway, about 6 miles west of Arrah. It has

delta now has inland communication by water. The sea deepens so gradually that large ships cannot anchor nearer than 5 miles from the shore; and during the monsoon, from October to December,

communication is sometimes suspended. Barges and native craft come up the river and go on by canal to BEZWADA, on the main channel of the Kistna, but they can only cross the bar at high tide. The export trade is partly to Europe; imports are chiefly local. In 1874-75, the number of ships which called (including steamers) was 235, of 106,000 tons burden. In 1882-83 the number of ships was 265, of 125,903 tons. The average annual value of the imports for the five years ending 1882-83 was £122,739; exports, £197,177. In 1882-83, the imports were valued at £108,328; and the exports at £152,814. The harbour light is a white fixed dioptric, on a white flagstaff 12 feet high.

History.—There is little reference to Masulipatam in the period of Hindu rule. The people were chiefly pastoral, and did not pay much attention to the advantages of a sea-borne trade. Orme has mention of a tradition that the port was founded in the 14th century by the Arabs who may have rounded Ceylon during one of their ventures to Southern India. The first reliable date in Masulipatam annals is 1425 A.D., when the Hindu Rájás of the Karnátak, who were fighting the Muhammadan Báhmani kings of the Deccan by the aid of mercenary Musalmán soldiery, gave permission for the erection of a Muhammadan mosque. In 1478, the Báhmani king, Muhammad II., entered Masulipatam. The Báhmanis sank before the rising power of the Orissa Rájás, who in turn yielded possession of the place to the Muhammadan king of Golconda, Sultán Kutub-Shah. Golconda kings held Masulipatam for a century and a half. It was during this period that the commercial prosperity of Masulipatam began to grow. Under the Golconda reign European traders first established themselves, and from the date of their arrival in the early years of the 17th century, Masulipatam possesses its modern and particularly English interest.

Masulipatam was one of the earliest English settlements on the Coromandel coast. Failing at Pulicat, the English established an agency here in 1611, under Captain Hippon, who commanded the *Globe* on what is known as the 'seventh voyage' of the East India Company. A fragment of a journal kept on the voyage by Peter Floris, a Dutch sailor in the English Company's service, is preserved among the MSS. at the India office, and has recently been published. In 1622, the English traders, driven by the Dutch from the Spice Islands, and also from Pulicat, succeeded in establishing their factory at Masulipatam. In 1628 they were driven out for four years, but they returned under a *farmán* from the Muhammadan king of Golconda, which is known as the 'Golden Firman.' The station then became the centre of English trade in these parts, and was managed by a Chief and Council. Long before the Dutch had also established a factory; and the French followed in 1669. In 1686,

upon some real or fancied affront by the king of Golconda, the Dutch quietly took possession of the government of the town, forbidding the English to trade outside the town so long as satisfaction was withheld by the Golconda king. This hardly-veiled attempt to crush the English factors did not last long, for, three years later, Zulfikár Khán, one of the Mughal Aurangzeb's generals, seized the factory, and in 1690 the full right of trade in Masulipatam was obtained for the English by *farmán* from the Mughal emperor. From this time until the Wars of the Karnátak there appear to have been no events of importance at Masulipatam. In 1750, Masulipatam was, with the surrounding country, given to the French by the Nizám; and from 1753 to 1759 the English were excluded. In the latter year Colonel Forde carried the fort by storm; and in 1766, the 'Northern Circars' were assigned to the English.

It was to promote the export of cotton goods that Europeans first settled on the Coromandel coast. Up to the present day, weavers form a large portion of the inhabitants of Masulipatam, though their trade has greatly declined since the beginning of this century. Their operations, besides weaving, include printing, bleaching, washing, and dressing. In former days, the chintzes of Masulipatam had a great reputation abroad for the freshness and permanency of their dyes, the colours becoming brighter after washing than before. There is still a small demand for these articles in Burma, the Straits, and the Persian Gulf; but steam machinery has nearly beaten the hand-loom out of the field. Another speciality was *metapollams* or kerchiefs for the head, generally called *madapollams*, after a weaving town of that name in Godávari District, where they were made; but this industry was ruined by the refusal of the West Indian negroes to wear these kerchiefs after their emancipation. Tartans, ginghams, towels, and table-linen are still manufactured to a small extent.

In modern times, Masulipatam has acquired a new interest as a centre of missionary labour in the Telugu country. In 1841, the Church Missionary Society established a station here under Fox and Noble, the latter of whom died in 1865, after an uninterrupted sojourn of twenty-four years. His work and name are commemorated in the Noble College, which is intended to impart a thorough English education to boys of the higher castes. This school, founded in 1843, is supported partly by subscriptions from England, and is also aided and inspected by Government. It ranks as a Collegiate School, and was in 1876–77 attended by 234 pupils, of whom 13 matriculated at the Madras University, and 2 passed the First Arts examination. In 1883–84 it was attended by 62 pupils, of whom 10 matriculated, and 4 passed the First Arts examination. Instruction is given daily in the Bible; but the school is not intended to be directly a proselytizing agency. The active work of conversion

is carried on chiefly through a boarding school for low-caste girls, which was managed for 31 years by Mrs. Sharkey, the wife of a Eurasian missionary. The progress of the school received a temporary check in 1864, when the storm-wave of that year drowned 33 out of its 65 pupils.

The number of converts in the neighbourhood of Masulipatam has increased rapidly in recent years, the majority having been won from the out-caste tribes of Malas (pariahs) and Madigas (leather-workers). In 1851 the number of adherents was only 60, but the returns show 260 in 1861, 1717 in 1871, and 4013 in 1878. In the last year there were also 11 European and 3 native missionaries, and 82 schools, with 2459 pupils. The total number of Christians in the town of Masulipatam returned by the Census of 1881 was 390.

The importance of Masulipatam is now on the decline. Her manufactures and trade have decayed, from causes which probably will not be reversed. Her garrison was withdrawn in 1865; and the reliefs from Secunderábád to Rangoon no longer pass this way, since the opening of the Madras Railway. But the heaviest blow was given by the storm-wave of 1864, which swept over the entire town, and is reported to have destroyed 30,000 lives. As happened also in 1679, this disaster occurred at night, so that many were drowned in their beds. Even in the European quarter, the survivors owed their lives to being warned in time from the fort, so that they were able to escape to the upper storeys of their houses. Mr. Gordon Mackenzie gives the following sketch of the occurrence:—'The north-east monsoon on this coast usually breaks about the 15th of October; but there was a cyclone near Calcutta on October 5, 1864, and this appears to have upset the usual course of the season, for the last fortnight of October was bright and clear, so that fears were entertained lest the rice crops in the delta should wither for want of water. It was therefore with pleasure that the people of Masulipatam, on the morning of November 1 (All Saints' Day), saw the sky overcast with dull leaden clouds, presaging speedy rain, and none surmised that a cyclone was approaching, although some did remark that the wind was from the north-west and not from the north-east as it ought to be at this season. About 8 A.M. the Master Attendant noticed that the barometer was rapidly falling, and at noon rain set in with violent gusts of wind. By 3 P.M. it was growing very dark, and the sky was no longer of a uniform dull leaden colour, but ragged masses of indigo-coloured clouds were driving before the gale. Mr. Noble dismissed his school, as there was no light to read by. It was quite dark before 6 P.M. Mr. Thornhill, the Collector, did not leave office until half-past six, and drove home with much difficulty, while the unfortunate clerks, who had to find their way to the town, were in still worse plight. At 8 P.M. the barometer had fallen to

29·50, and the wind began to shift to the east of north, increasing in violence, so that trees were blown down and roofs lifted off houses.

'At 10 P.M. the gale was east-north-east, which gave the Master Attendant hopes that the cyclone was passing inland to the south of Masulipatam; but now came another danger, more to be dreaded than the wind. It was new moon, and the tide was full on the bar at 9h. 20m., and at the tidal lock about 10 P.M. Thus the sea, driven into this bight of the coast before the storm, came at the very moment of high spring-tide, and an enormous wave, 13 feet above ordinary high-water level, was borne inland by the gale. The gates of the tidal lock were wrenched off, and of the six lascars stationed there, only two lived to tell the tale. (One of them clung first to a palmyra beam, and afterwards to a boat, and was carried 14 *miles inland!*) Had the ramparts been still intact, they could have broken the force of the wave; but meeting with no obstacle, it rushed through the Fort. There were more than 2000 people living in the Fort; and of all the native houses, nothing was left but a few posts. The Commissariat go-downs fell, and casks of porter and arrack strewed the country for miles inland. The shops of Messrs. Fruvell and Maiden fell, burying the inmates, and so also did the house of Major Jackson of the Nizám's service; but Messrs. Jackson and Maiden escaped from the ruins with their lives, how, they themselves could hardly tell. Captain Maiden, the Master Attendant, with his family, were saved, as their house had been substantially built by the Dutch, and withstood the flood. The little chapel of St. Catherine did not fall; and two priests saved their lives by climbing on the brick arch above the altar, one of them holding above the flood the consecrated host which had been reserved in the tabernacle on the altar. On the east of the Fort, between it and the sea, lay the village of Gilkadinde, with a population of about 2000 fishermen and shipwrights. This village was completely swept away, nothing being left to show its site.

'The flood was at its height at the Fort between half-past ten and eleven, and in Masulipatam town about half-an-hour later. The scene in the town was worse than at the Fort, because there were more houses to fall and more people to lose their lives. The houses with mud walls soon fell, and crushed their inmates. The wind was so fierce that a strong man could not stand against it. Many who attempted to make their way to any substantially built houses (such as that of the Nawáb) were at once swept away by the swirling flood, and drowned. Large logs of timber, cargo boats, and fragments of wrecked vessels, with beams from fallen roofs, were washed about the streets, injuring buildings which might otherwise have escaped. The Bráhman suburb of Sivagangápett especially suffered. Nothing was left standing, except the pagoda; and out of 700 inhabitants of that quarter, only 70 saved their lives.

'Before midnight the water began to subside in the town, and then it seemed that, if possible, the horrors of this woful night increased. It is familiar to all who have watched the action of surf on a beach, that the receding wave seems to make more noise and to tear up gravel with more violence than does the quick rush of the incoming surge. So this enormous wave, 13 feet above high-water, which was probably still pursuing its course inland,—it penetrated 17 miles from the coast,—now receded with a continued roar, uprooting and carrying everything before it towards the sea. Huge blocks of masonry on the causeway between the Fort and the town were moved to a distance of 60 feet.'

A similar calamity is related to have befallen Masulipatam in the days of Dutch occupation.

Masúra.—Town in Ratnágiri District, Bombay Presidency; situated in lat. 16° 10′ N., and long. 73° 32′ 30″ E., 8 miles north-east of Málwán. Population in 1881 under 5000. Has been identified as the Muziris of Ptolemy and the Periplus, then one of the chief marts of Western India; but the identification is disputed. Post-office, and school, with 215 scholars in 1883-84.

Masúri.—Town and sanitarium in Dehra Dún District, North-Western Provinces.—*See* MUSSOOREE.

Mát.—North-easterly *tahsíl* of Muttra (Mathurá) District, North-Western Provinces; lying along the east bank of the Jumna (Jamuná), and conterminous with the *parganá* of Mát. The *tahsíl* is a long narrow tract of country bordered on the west by the Jumna river, with an extreme length of 28 miles, and an average breadth of 7 miles. There are two considerable lakes in the *tahsíl*, the Noh *jhíl* in the north, about six miles in length by a mile broad; and the Moti *jhíl* in the south, about two miles long by three hundred yards broad. The greater part of both is brought under cultivation for the *rabí* or spring crops before they are flooded by the rains. The prevailing soil is a rich sandy loam, the sand somewhat predominating over the clay; but in almost all the villages there are veins of a richer, firmer soil, equalling *dúmat* in productiveness. The *khádar* or lowlands in the neighbourhood of the river and *jhíls* is purely alluvial, and varies from a sticky clay to a rich *dúmat* with some traces of sand. In the north, one of the chief features of the country is a low ridge of sandhills or ridges rising from 20 to 30 feet above the general level. The spring crops consist of wheat, barley, gram, and mustard, the latter generally sown along with wheat. The principal rain crops are *joár*, *bájra*, Indian corn, and cotton. Sesamum (*tíl*), *arhar*, pulse, and hemp are also grown, but ordinarily in the same field with *joár*. Very little sugar-cane or rice is raised.

The total area of the *tahsíl* is 221 square miles, of which 175·4 square

miles are cultivated, 31 square miles cultivable, and 14·6 square miles uncultivable waste. Population (1872) 100,248; (1881) 95,446, namely, males 50,978, and females 44,468; showing a decrease of 4802, or 4·7 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 89,346, and Muhammadans, 6100. Amount of Government land revenue, £27,252; or including local rates and cesses, £30,657. Amount of rent, including cesses, paid by the cultivators, £46,487. In 1883, Mát *tahsíl* contained 1 criminal court, with 3 police circles (*thánás*), a regular police force of 38 men, and a village watch of 211 *chaukídárs*.

Mát.—Town in Muttra (Mathurá) District, North-Western Provinces, and head-quarters of Mát *tahsíl;* situated in lat. 27° 35′ 42″ N., long. 77° 44′ 56″ E. Although the head-quarters of the *tahsíl*, it is a small and unimportant place, with a population in 1881 of only 2550. Mát is a station of Hindu pilgrimage, and is said to derive its name from the milk-pans (*mát*) upset by Krishna in his childish play. The *tahsíli* and police station are situated within the enclosure of an old mud fort; post-office; weekly market.

Mátábhángá (or *Háuli*).—One of the three great 'Nadiyá rivers,' the other two being the BHAGIRATHI and JALANGI. All three rivers are offshoots of the Padmá (the main channel of the Ganges), and from the head-waters of the HUGLI RIVER (*q.v.*). The Mátábhángá leaves the parent stream about 10 miles below the point where the Jalangí diverges from it. It flows first in a south-easterly, and afterwards in a tortuous south-westerly direction to Krishnaganj, due east of Krishnagar, the District head-quarters.

The Mátábhángá has its principal offtake from the Ganges near Maheshkunda, about 40 miles below the Bhairab mouth, and 83 miles below that of the Bhágírathí. At present it is the south-easternmost of the Húglí head-waters. During the first 40 miles after leaving the Ganges, it is known as the Háulí or Kúmar river. At about the 40th mile, the true Kúmar river, locally known as the Pangásí, branches off to the east, and carries away four-fifths of the waters to the Sundarbans. The remaining fifth flows down the lower Mátábhángá, which here takes the name of the Churní river, till it joins the Bhágírathí near Chagdah. The offtake of the upper Mátábhángá or Hauliah from the Ganges is subject to the same shifting and changing as the Bhágírathí. Within the recollection of the present Superintending Engineer, its offtake from the Ganges has moved down ten miles. The whole length of the Mátábhángá, upper and lower, from its present offtake at Maheshkunda, is 121 miles to its junction with the Bhágírathí at Chagdah.

The Mátábhángá is a comparatively narrow stream, with well-defined banks throughout. It presents more the appearance of a canal than a

river to the traveller passing along it by boat, the width from high bank to high bank being only a few hundred feet. During the past 65 years it has undergone many vicissitudes. Up to 1820, the Kachíkátá river drew off most of the Mátábhángá waters to the eastwards into the Garái. In 1820–21 the Kachíkátá was closed, and for a short time it seemed that the Mátábhángá might become an enormous distributary of the Ganges. But shortly afterwards, the Pangási or true Kúmar river, opened up into a wide channel, which carried off four-fifths of the Mátábhángá waters. From time to time, however, the Kúmar or Pangásí mouth has, in its turn, showed signs of silting up. The history of the Mátábhángá in the dry season during the 63 years from 1822 inclusive to 1884, may be summarized as follows:—Closed, 54 years; open to a minimum depth of one and a half to two feet, 6 years; opened to minimum depth of two to three feet, 3 years. During the rainy season the Mátábhángá rises to about the same extent as the Jalangí, and is passable for large boats and river steamers.

Mátáikhár.—Forest reserve in Kámrúp District, Assam, on one of the lowest spurs of the Khási Hills. Area, 2240 acres, or 3·5 square miles. The soil is a sandy loam; the trees are chiefly *sál* (Shorea robusta, *Gærtn.*), but none are of large growth. The timber depôt is at Kukurmára on the Kulsí river.

Matak.—Tract of country in Lakhimpur District, Assam, lying along the south or left bank of the Brahmaputra; bounded on the south by the Burí Dihing river, and on the east by the Singpho Hills. During the later years of the Aham dynasty, this region acquired

seeds, 841 acres; fibres, 669 acres (of which 665 acres were under cotton); and miscellaneous crops, 2702. In 1883, there were in the Sub-division 2 criminal courts; police circles (*thánás*), 1; regular police, 49 men; village watch (*chaukídárs*), 299. Land revenue, £26,368.

Mátar.—Chief town of Mátar Sub-division, Kaira District, Bombay Presidency. Lat. 22° 42′ N., long. 72° 59′ E. Population (1881) 4889. Sub-divisional revenue and police offices. Post-office. Srawák or Jain temple. One school, with 247 pupils in 1882–83.

Matári. — Town in Hála Sub-division, Haidarábád (Hyderábád) District, Sind, Bombay Presidency; situated on a slight eminence, in lat. 25° 35′ 30″ N., and long. 68° 28′ 30″ E., 20 miles south from Hála town, and 16 miles north of Haidarábád. Population (1881) 5054. Muhammadans numbered 4245; Hindus, 717; and 'others,' 92. Head-quarters of a *tappádár;* contains a staging bungalow, *dharmsála,* Government vernacular school, police lines, etc. Municipal revenue (1882–83), £303; incidence of taxation, 1s. 2¼d. per head. Local trade in grain, oil-seeds, cotton, silk, piece-goods, and sugar. The transit trade is valued at nearly 1 *lákh* of rupees (£10,000). Matári is said to have been founded in 1322, and possesses besides a

the religious sect of the Mataks or Maráns, of whom the Tiphuk Gosáin is the spiritual chief.

Mátámurí.—One of the chief rivers of the Chittagong Hill Tracts, Bengal. Rises in the range of mountains dividing Arakan from Chittagong, near the Sangu, to which river the Mátámurí runs parallel for about 67 miles on the other side of a chain of hills, and ultimately falls into the Bay of Bengal. Captain Lewin thus describes the scenery on the Twine Kyaung, one of its tributaries: 'The stream ran briskly in a narrow pebbly bed, between banks that rose nearly perpendicularly, and so high that the sun only came down to us by glints here and there. Enormous tree ferns hung over our heads some 50 feet up, while the straight stems of the *garjan* tree shot up without a branch, like white pillars in a temple; plantains, with their broad drooping fronds of transparent emerald, broke at intervals the dark-green wall of jungle that towered up in the background; and, from some gnarled old forest giant here and there, the long curving creepers threw across the stream a bridge of nature's own making. Sometimes we came upon a recess in the bank of verdure which rose on either hand; and there the tinkling of a cascade would be heard behind the veil, its entry into the stream being marked by a great grey heap of rounded rocks and boulders, tossed about in a way that showed what a sweep the water comes down in the rains. Scarlet dragon-flies and butterflies of purple, gold, and azure flitted like jewels across our path; while silvery fish streaked with dark-blue bands, flew up the stream before us like flashes of light, as we poled along.'

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Mátar. — Sub-division of Kaira District, Bombay Presidency. Bounded on the north by Daskroi and Mehmadábád; on the east by Nariad; on the south by Cambay; and on the west by the Sabarmati river. Besides the main body of the Sub-division, are some isolated villages cut off from the rest by belts of Baroda and Cambay territory. Area, 217 square miles. Population (1872) 78,673; (1881) 78,279, namely, 41,246 males and 37,033 females, dwelling in 81 towns and villages, containing 18,946 houses. Hindus number 69,374; Muhammadans, 7884; and 'others,' 1021.

The *táluk* lacks natural drainage, so that the climate is feverish during the rains. Rice lands are found in many parts. In 1862–63, when the assessment was fixed, there were 15,086 holdings, with an average area of 6½ acres, paying an average assessment of £1, 12s. Of the total area of 217 square miles, 16 square miles are occupied by the lands of alienated villages. The remainder contains 99,888 acres of occupied land; 14,352 acres of cultivable waste; 8235 acres of uncultivable waste; and 6296 acres of roads, ponds, rivers, and village sites. In 114,240 acres there are 59,499 acres of alienated land in Government villages. In 1876–77, of 37,901 acres, the total area held under tillage, 1951 acres were fallow or under grass. Of the remaining 35,950 acres, 3584 acres were twice cropped. Grain crops occupied 33,542 acres; pulses, 1780 acres; oil-seeds, 841 acres; fibres, 669 acres (of which 665 acres were under cotton); and miscellaneous crops, 2702. In 1883, there were in the Sub-division 2 criminal courts; police circles (*thánás*), 1; regular police, 49 men; village watch (*chaukídárs*), 299. Land revenue, £26,368.

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The *táluk* lacks natural drainage, so that the climate is feverish during the rains. Rice lands are found in many parts. In 1862–63, when the assessment was fixed, there were 15,086 holdings, with an average area of 6½ acres, paying an average assessment of £1, 12s. Of the total area of 217 square miles, 16 square miles are occupied by the lands of alienated villages. The remainder contains 99,888 acres of occupied land; 14,352 acres of cultivable waste; 8235 acres of uncultivable waste; and 6296 acres of roads, ponds, rivers, and village sites. In 114,240 acres there are 59,499 acres of alienated land in Government villages. In 1876–77, of 37,901 acres, the total area held under tillage, 1951 acres were fallow or under grass. Of the remaining 35,950 acres, 3584 acres were twice cropped. Grain crops occupied 33,542 acres; pulses, 1780 acres; oil-seeds, 841 acres; fibres, 669 acres (of which 665 acres were under cotton); and miscellaneous crops, 2702. In 1883, there were in the Sub-division 2 criminal courts; police circles (*thánás*), 1; regular police, 49 men; village watch (*chaukídárs*), 299. Land revenue, £26,368.

Mátar.—Chief town of Mátar Sub-division, Kaira District, Bombay Presidency. Lat. 22° 42′ N., long. 72° 59′ E. Population (1881) 4889. Sub-divisional revenue and police offices. Post-office. Srawák or Jain temple. One school, with 247 pupils in 1882–83.

Matári. — Town in Hála Sub-division, Haidarábád (Hyderábád) District, Sind, Bombay Presidency; situated on a slight eminence, in lat. 25° 35′ 30″ N., and long. 68° 28′ 30″ E., 20 miles south from Hála town, and 16 miles north of Haidarábád. Population (1881) 5054. Muhammadans numbered 4245; Hindus, 717; and 'others,' 92. Head-quarters of a *tappádár;* contains a staging bungalow, *dharmsála*, Government vernacular school, police lines, etc. Municipal revenue (1882–83), £303; incidence of taxation, 1s. 2¼d. per head. Local trade in grain, oil-seeds, cotton, silk, piece-goods, and sugar. The transit trade is valued at nearly 1 *lákh* of rupees (£10,000). Matári is said to have been founded in 1322, and possesses besides a

the religious sect of the Mataks or Maráns, of whom the Tiphuk Gosáin is the spiritual chief.

Mátámurí.—One of the chief rivers of the Chittagong Hill Tracts, Bengal. Rises in the range of mountains dividing Arakan from Chitta-

Mataundh.—Town in Bánda *tahsil*, Bánda District, North-Western Provinces. Distant from Bánda town 12 miles west. Population (1872) 5990; (1881) 6258. Hindus number 5969, principally Rájputs; and Muhammadans, 289. Market on Mondays and Thursdays; trade in tobacco, salt, grain, cotton, and leather. According to tradition, the scene of a battle between Chhatar Sál and a Jain Guru. A Rájput *zamíndár*, named Murli, sheltered here some European fugitives from Naugáon during the Mutiny, and obtained as a reward a grant of land. School, police station, and sub-post-office.

Mátherán (*The Wooded Head*, or *The Mother's Wood*).—Hill sanitarium in Thána District, Bombay Presidency; situated in lat. 18° 58′ 50″ N., and long. 73° 18′ 20″ E., 2460 feet above sea-level, about 30 miles east of Bombay. Population, exclusive of hillmen, 2201 in February 1882. The hill was explored in May 1850 by Mr. Hugh Malet, of the Bombay Civil Service, and to him belongs the credit of making its advantages known. Mátherán is delightfully situated on an outlier of the Western Gháts, commanding noble views of the plain which separates the mountain chain from the sea.

The traveller proceeds from Bombay by the Great Indian Peninsula Railway to Nárel or Nerál Station (54 miles), at the north-east foot of the hill, and thence to Mátherán (7 miles) by palanquin or pony. The road winds upwards through rich forests, and though broad enough for two ponies is unfit for carriages or carts. From the railway station it passes through the village of Nerál, and runs for the first mile along the foot of the rocky spur, skirting a belt of rice lands. For the second mile it goes along the western face of the spur, and at a quarter of a mile beyond the second milestone tops the crest of the spur and runs along the plateau that stretches to the body of the hill. A little beyond the fifth milestone stands the toll, on the neck between the high headlands of Governor's Hill to the north and Gárbat Hill to the south.

The summit, which has an area of about 8 square miles, consists of a main central block and two smaller side ridges or wings thickly wooded, and affording good riding ground. The central block has an average breadth of about half a mile, and stretches nearly north and south, from the narrow ridge of Hart Point to the rounded bluff of Chauk in the south. It may be roughly divided into three parts, a north, middle, and south section. For about a mile from Hart Point to the Church plateau, the northern section is thinly peopled, with only a broken line of houses separated by stretches of wood. On the Church plateau the

houses stand closer together, and along the edge of the eastern cliff, groups of huts and small shops cluster round the market-place. The slopes of the central portion are the thickest peopled part of the hill, with rows of closely-grouped houses stretching across nearly the whole breadth of the hill. The southern section, except the Chauk hotel and a few private dwellings, is almost without houses.

The peculiar charm of Mátherán is its Points. These form, as it were, rocky promontories jutting into mid-air, from which the spectator looks down upon the valleys more than 2000 feet below. In the morning the mist lies between himself and plains, and, as it gradually melts before the rising sun, discloses one by one the villages and fields which it has concealed beneath. The six leading Points or Headlands are the Hart at the north, and Chauk at the south of the central hill; Panorama Point at the north and Gárbat at the south of the east wing; and Porcupine Point at the north and Louisa at the south of the west wing; in addition to these, three other spots are known as the Artist, Sphinx, and Bartle Points. Of the several smaller bluffs the seven most important are, Alexander, Little Chauk, One Tree Hill, Danger, Echo, Landscape, and Monkey.

A very striking view is obtained, especially in the evening light, from Panorama Point. The level plain extends from the foot of the hill to the broken coast-line, about 40 miles off. The great city of Bombay, with its towers and shipping, lies under the sunset, and the ocean stretches beyond. Besides the beauty of the summit and of its views, a great charm in Mátherán is the plateau or terrace that almost encircles the hill from two to three hundred feet below its crest. This belt has a rich soil, yearly freshened by mould swept down from the higher land. The hill-sides are scarred by several small streams, which, though dry during the greater part of the year, bear in their clean-swept rocky channels traces of the strength of their monsoon floods. The rides through the woods have a special freshness from the sea-breeze; and, although the elevation is not lofty enough to counteract the heats of summer, it suffices to render Mátherán a cool and salubrious retreat for the citizens of Bombay during the spring and autumn months.

In spite of the heavy rainfall of about 200 inches, even the largest streams cease to flow soon after Christmas. Of eleven springs, only two, Harrison's on the east, and Malet's on the west, of the main hill-top, last throughout the year. The latter has never been known to fail in its supply, and is the only drinking water used by European visitors. Mátherán is singularly free from malaria; there is no marsh on any part of the hill, every stream bed is a bare rock, and in almost all seasons the forest can be entered without risk. It is this freedom from malaria that makes Mátherán so healthy a place to most

visitors. The returns for the 14 years ending 1881 show an average yearly rainfall of 244·30 inches. The thermometer readings for the six years ending 1881 show that, on an average, December and January are the coldest months, with a mean maximum of 69·9° F.; and May and June the warmest, with a mean of 81·5°.

According to the Census of 1881, the total number of strangers, exclusive of the local hillmen, was 2201, namely, 1307 Hindus, 766 Muhammadans, 107 Christians, 20 Pársís, and 1 Chinaman. Almost all the visitors to Mátherán are Europeans, of whom the greatest number come from Bombay. As a place of resort Mátherán has two seasons, after the rains in October and November, and from the 1st of April to the middle of June. The management of the station is entrusted to the civil surgeon, who, with the title of superintendent, has, within station limits the powers of a third-class magistrate. Subject to the Collector of Thána, he has the entire management of the station, looking after the repairs of roads, settling the charges of palanquin-bearers, pony-keepers, and porters, and regulating the use of water, the conservancy arrangements, and the market. He holds office for two years, and has under him a first-class hospital assistant, and 4 constables, who, besides their dispensing and police duties, attend to the general work of his office. For the convenience of visitors, a telegraph office is open from October to June, and throughout the season there are two daily postal deliveries.

The chief public buildings are the post and telegraph offices, the superintendent's residence, the police lines, the rest-house, the hotels, market, the library, gymkhána, a church and Catholic chapel. The leading points on the hill-top may be comfortably seen in three rides or walks from one of the hotels. Excursions may also be made to Prabal Point, where there is a fort of the same name which signifies 'Mighty.' For this place the excursionist starts from Louisa Point, which overlooks a majestic cliff, whence in the rainy season a cataract descends 100 feet in width, falling into the valley below by a single leap of 1000 feet. Houses, of which there are about 85, are generally let from 1st March to 15th June, and from 1st October to 31st December. The conservancy arrangements are good, and the hotel accommodation is on an unpretending but adequate scale. Until within the last thirty-five years, Mátherán Hill was inhabited solely by wild forest races of non-Aryan origin and predatory habits—Dhangars, Thákurs, and Kathkáris. These still linger in the woods, but their little communities are now believed to be dying out. An interesting account of Mátherán has been published by J. Y. Smith, M.D. (Edinburgh: Maclachlan & Stewart, 1871).

Mathura.—District and town, North-Western Provinces.—*See* MUTTRA.

Mathura.—Town in Gonda District, Oudh; situated 2 miles north of the Rápti river, 6 miles from Ikauna, and 15 from Balrámpur, with both of which towns it is connected by road. Population (1881) 3070. Chief seat of retail trade in the neighbourhood. *Bázár*, with 85 shops. The principal buildings are a double-storied brick house, the property of the Mahárájá of Balrámpur, 3 Hindu temples, a mosque, and a village school. A handsome Muhammadan *dargah*, erected by Nawáb Asaf-ud-daulá, is situated about a mile to the north of the village. It is in charge of a *fákír* of peculiar sanctity, who, on the occasion of the annual *Bakr 'Id* festival, receives the donations of several thousand devotees.

Mathwár.—Petty State under the Bhopáwar Agency, Central India. Area, 140 square miles, containing 36 villages. Population (1881) 2630, occupying 525 houses. Hindus numbered 2207; Muhammadans, 14; and aboriginal tribes (Bhíls), 409. The petty State of Mathwár is bounded north by the State of Rajpur (Alí Rajpur); east by the Holkár's *parganá* of Chikalda; south by the Narbadá river; and west by Chhota Udaipur State, Rewa Kántha Agency. The country is wholly jungle and hills, inhabited by Bhíls and Bhilalas. The Census must have included many of them among Hindus. The revenue is estimated at £380; the State pays no tribute. The Thákur, Ranjít Singh, was educated at the Indore Residency School.

Mátiakhár.—Forest reserve in Kámrúp District, Assam, on one of the lowest spurs of the Khási Hills.—*See* MATAIKHAR.

angle of about 45°. The current acting on the floats, the wheel revolves, dipping each pair of buckets successively; these passing under water and filling, retain on rising from two to four pints each, which, on arriving at the top, they discharge into troughs that carry the water into the fields, and re-descend to bring up a fresh supply.

Mátín.—*Zamíndárí* estate in the north of Biláspur District, Central Provinces. Area, 569 square miles, with 65 villages and 1683 occupied villages. Population (1881) 5950, namely, males 3128, and females 2822. With the exception of the Ahíri estate in Chándá District, Mátín is the most sparsely populated tract in the Central Provinces, having a density of only 10·4 persons per square mile. The estate lies entirely in the hill country, and is infested to some extent with wild elephants. The chief is a Kunwár. Near Mátín rises the sacred hill called Mátín Deva.

Matlá (or *Ráimatlá*).—River in the District of the Twenty-four Parganás, Bengal. The name given to the united streams of the BIDYADHARI, KARATOYA, and ATHARABANKA, which flow southward through the Sundarbans into the Bay of Bengal, affording the means of navigation for shipping to within 28 miles from Calcutta. The Matlá estuary is about 30 miles east of Ságar Island, and is

separated from the Jámirá river by Balchari Island and flats. It is above a league wide at the entrance, the channel leading in a northerly direction. The depths at the entrance are 9 to 10 fathoms; the southern extremity of the land, on the eastern side, is situated in lat. 21° 32′ N., with a shoal bank projecting a considerable distance farther to seaward. The Matlá has several branches at its mouth, the westernmost of which extends to the salt-water lake near Calcutta, and contains never less than 3 fathoms of water. The main stream of the river is easily navigable as far as the town of Matlá or PORT CANNING (now abandoned), situated about 50 or 60 miles from the river's mouth, and 28 miles by railway from Calcutta.

Matlá.—Village in the District of the Twenty-four Parganás, Bengal. —*See* PORT CANNING.

Mátra Timba.—Petty State in the Jháláwár division of Káthiáwár, Bombay Presidency; consisting of 1 village, with 2 separate shareholders. Population (1881) 433. Area, 6 square miles. Situated 17 miles west-north-west of Botad station on the Bhaunagar-Gondal Railway. Estimated revenue in 1881, £120; from which tribute of £26 is paid to the British Government, and £7, 4s. to the Nawáb of Junágarh.

Mattod.—Village in Chitaldrúg District, Mysore State. The population which in 1871 was returned at 1416, was in 1881 only 598. The seat of a line of Nayak *pálegárs*, who were distinguished for their hereditary beauty and stature. The fort was built in 1710; and the
The chief public buildings are the post and telegraph offices, the superintendent's residence, the police lines, the rest-house, the hotels, market, the library, gymkhána, a church and Catholic chapel. The leading points on the hill-top may be comfortably seen in three rides or walks from one of the hotels. Excursions may also be made to Prabal
Point, where there is a fort of the same name which signifies 'Mighty'
iron-ore, and copper. The articles made consist entirely of bangles and wrist-rings for women, in five different colours—black, green, red, blue, and yellow.

Mattra (*Mathurá*).—District and town, North-Western Provinces. —*See* MUTTRA.

Ma-tun.—River in Thayet-myo District, Irawadi Division, British Burma; rises near the lofty Myin-ka-dek Peak of the Arakan Yoma Hills; flows south, and 8 miles from its source enters British territory. It then crosses the Min-dun and Ka-ma townships, and falls into the Irawadi just above Ka-ma, about 50 miles in a direct line from where it enters the District. The course of the Ma-tun is so winding, that the actual distance traversed by it in British Burma is about 150 miles. The scenery throughout its whole length is exceedingly picturesque. Large quantities of the produce of its fertile valley—rice, cotton, cutch, timber, etc.—are floated down and rafted at its mouth. Ma-tun has no

important tributaries, most of its affluents being merely mountain torrents.

During the dry season the fields on the high banks, which are sometimes 30 feet above the level of the water, are irrigated by means of a simple but ingenious self-acting under-shot water wheel, driven by the current. This machine has been in use here time out of mind, and is not found elsewhere in Burma; yet no tradition exists as to the period of its introduction, or the person by whom it was invented. At the spot where the wheel is to work, common jungle-wood posts, generally eight in number, are driven into the ground in two lines of four posts each parallel to the course of the river, one line close under the bank and the other some distance out in the stream. A strong bar is securely fastened along the top of each line, and on these two bars, at right angles to the course of the river, rests the shaft of the wheel, which thus revolves between the two lines of posts which support it. The whole of the wheel, with the exception of the shaft, which is of some hard wood, is constructed of bamboo. Attached to the outer ends of the spokes, in a similar position to that of the floats of the paddle of a steamer, are flaps or paddles of coarse bamboo mat-work. Alternately with these floats, on either side of the wheel, are placed the buckets, which are joints of bamboo closed at one end by the natural knot of the wood. These buckets, of which there are thus twice as many as there are floats or flaps, are so arranged that as the wheel turns they dip into the water above the wheel, and rise from it below at an angle of about 45°. The current acting on the floats, the wheel revolves, dipping each pair of buckets successively; these passing under water and filling, retain on rising from two to four pints each, which, on arriving at the top, they discharge into troughs that carry the water into the fields, and re-descend to bring up a fresh supply. The diameter of the wheel, which is sometimes as much as 18 feet, is regulated by the height of the bank, and the shaft is placed at such a distance above the level of the stream that each float in turn passes completely under, and the whole of its surface is acted upon by the current. If it should so happen that the force of the water is not sufficient, dams are constructed higher up, and after two or three days or less, as may be necessary, the dam is cut, and the stored water turned on to the wheel.

Mau.—Town and British cantonment in Indore State, Central India. —*See* MHOW.

Mau.—South-eastern *tahsíl* of Jhánsí District, North-Western Provinces, intersected by spurs of the Vindhyan range, and much intermixed with portions of Orchha State. Area, 441 square miles, of which 193 are cultivated. Population (1872) 104,281; (1881) 107,151, namely, males 54,931, and females 52,220. Classified according to religion, there were in 1881—Hindus, 101,506; Muhammadans, 4439; Jains,

1205; and Christian, 1. Number of villages, 164. Government land revenue, £10,496, or including local rates and cesses levied on the land, £11,672. Total rental paid by cultivators, £30,029. In 1884, the *tahsíl* contained 3 civil and 3 criminal courts, with 9 police circles (*thánás*), a regular police force of 91 men, and a village police of 217 *chaukídárs*.

Mau.—Town in Mau *tahsíl*, Jhánsí District, North-Western Provinces, and the principal commercial centre of the District; situated 40 miles south-east of Jhánsí civil station, on the Orái and Ságar road, in lat. 25° 14′ 40″ N., long. 79° 10′ 45″ E. The town is connected with Jhánsí and Garotha by District roads. It is also known as Mau-Ránípur, from the town of Ránípur situated about 4 miles to the west, with which it forms one municipality. Population of Mau proper (1872) 16,428; (1881) 15,981, namely, males 7805, and females 8176. Classified according to religion, there were in 1881—Hindus, 14,316; Muhammadans, 1485; Jains, 179; and Christian, 1. The municipal income of the two towns, with a total population of 22,827 in 1881, amounted in 1883–84 to £1459, of which £1229 was derived from taxation, mostly octroi; average incidence of taxation, 1s. 0⅞d. per head.

Mau is a remarkably picturesque town; its houses are well built, with deep eaves between the first and second stories, and hanging balcony windows of unusual beauty. Trees line many of the streets, and handsome temples ornament the town, although much hidden behind enclosing walls. The principal temple is that of the Jains (who form an important commercial body), which stands by itself, and presents a noble appearance with its two solid spires and many enclosures. The principal thoroughfare runs from east to west—at first a narrow way, but opening out into a wide metalled roadway leading up to the *ganj* or market, a large open space lined on two sides by masonry shops; on a third, by an old brick-built fort with bastions, containing the *tahsíli* buildings, police station, and post-office; and on the fourth, by two *thákurdwaras*. Westward of the market, the wide and well-made main road passes with a winding course to the *bará* (or principal *bázár*), consisting of three or four streets of well-made shops. During the Maráthá rule, Mau was partially fortified with a high stone wall, never apparently completed; but this wall has now been thrown down to a great extent, and the stones used for bridge-making and other useful purposes in and about the town.

Mau has only risen into a place of commercial importance within the last 100 years, having been previously merely a small agricultural village. The exorbitant demands of the Rájá of the neighbouring State of Chhatarpur caused an influx of merchants into Jhánsí, who settled down at Mau, which is now the most important commercial centre in

Bundelkhand. The town is renowned for the manufacture of *kharuá* cloth, which is exported to all parts of India, and which forms the staple trade of Jhánsí District. The wealthy merchants and bankers of the town carry on trade with Amráoti in the Berárs, Mírzápur, Nágpur, Farukhábád, Háthras, Cawnpur, and Delhi. The imports consist of sugar, English piece-goods, silk, metals, coffee, and a large variety of other articles, of an estimated annual value of £110,000; the exports of dyed and undyed cloth are estimated at an annual value of £140,000.

Mau (also known as *Chibu*).—South-eastern *tahsíl* of Bánda District, North-Western Provinces; lying along the south bank of the Jumna (Jamuná), intersected by outlying spurs of the Vindhyan Hills, which here nearly abut upon the river, and crossed by the Jabalpur branch of the East Indian Railway. The jungles and forest of the *tahsíl* are decreasing in area, owing to the export trade in firewood and timber with Allahábád; and the margin of cultivable waste land is yearly diminishing. Numerous villages, scattered along the chain of the Vindhya Hills, possess fertile plains of small extent. Area of the *tahsíl*, 316·5 square miles, of which 159·3 square miles are cultivated. Population (1881) 74,622, namely, males 37,948, and females 36,674. Hindus number 72,465; Muhammadans, 2149; Jains, 6; and 'others,' 2. Number of villages, 156. Government land revenue, £10,935, or including local rates and cesses, £13,819; rental paid by cultivators, £19,946. In 1884 the *tahsíl* contained 1 criminal court, with 3 police circles (*thánás*), a regular police force of 43 men, and a village watch of 224 *chaukídárs*.

Mau.—Town in Bánda District, North-Western Provinces, and head-quarters of Mau *tahsíl;* situated on the right bank of the Jumna, 30 miles distant from Allahábád city, and 9 miles from the Bargarh station on the East Indian Railway. Population (1872) 2944; not returned separately in the Census Report of 1881. Anglo-vernacular school, and police station. Market on Sundays and Fridays.

Mau.—Town in Muhammadábád *tahsíl*, Azamgarh District, North-Western Provinces.—*See* MAU NATBHANJAN.

Mau Aimá.—Town in Soráon *tahsíl*, Allahábád District, North-Western Provinces; situated in the trans-Gangetic portion of the District, in lat. 25° 41′ 43″ N., and long. 81° 57′ 50″ E., 8 miles north-east of Soráon, and 21 miles north of Allahábád city. Population (1872) 6189; (1881) 8423, namely, Muhammadans, 4627, and Hindus, 3796. The local market has a considerable trade with Oudh and Jaunpur in grain, cloth, tobacco, *gur*, and cotton. The place was formerly celebrated for its cloth manufactures, but they have been almost entirely driven out of the field by European fabrics. A small

house-tax for police and conservancy realized £116 in 1881-82. Post-office and police station.

Ma-úbin.—Head-quarters of Thonegwa (Thun-kwa) District, Irawadi Division, British Burma. Lately built on low land in the delta of the Irawadi, the highest portions, towards the north and east, being barely an inch above the level of high-water mark in the Irawadi during the rains. In the south and west are fisheries, and the ground here becomes one large swamp for a great part of the year. Ma-úbin contains court-houses, a small jail, police station, charitable dispensary, and market. Population (1881) 1569; local revenue, in addition to the imperial and provincial revenue, £597.

Maudhá. — Eastern *tahsíl* of Hamírpur District, North-Western Provinces, conterminous with Maudhá *parganá*, and consisting chiefly of a level alluvial plain, on the west bank of the river Ken. Area, 232 square miles, of which 145 square miles are cultivated. Population (1881) 49,905, namely, males 25,313, and females 24,592. Hindus numbered 42,275, and Muhammadans 7630. Number of villages, 82. Government land revenue, £10,239, or including local rates and cesses levied on land, £11,472; total rental paid by the cultivators, including cesses, £20,518. In 1883, the *tahsíl* contained 1 civil and 1 criminal court, with 2 police circles (*thánás*), a regular police force of 28 men, and a village watch of 167 *chaukídárs*.

Maudhá.—Town in Hamírpur District, North-Western Provinces, and head-quarters of Maudhá *tahsíl*; situated in lat. 25° 40′ 30″ N., long. 80° 9′ 25″ E., about a mile from the Mahobá road, and about 20 miles from Hamírpur town. Founded, according to tradition, by Madan Pae, a Purihár Rájput, in 713 A.D. The tomb of Dalír Khán, the son of the Mughal Governor of Allahábád, who was slain here in 1730, attracts a considerable number of votaries. The fort was built by Khumán Singh and Gumán Singh of Charkhári, on the site of which Alí Bahádur of BANDA afterwards erected a stone fortress, now the nucleus of a separate village. Population (1872) 6025; (1881) 6116, namely, Muhammadans, 3234, and Hindus, 2882. Area of town site, 110 acres. Of the Muhammadan population, the great majority are descendants of converts, and in manners and customs are probably more than half Hindus. *Tahsíli*, police station (in the fort), Anglo-vernacular school, and post-office. The town contains several mosques and tanks, now much out of repair. No manufactures; little trade. During the Mutiny, a body of rebels sent by the Maráthá leader, Bhaskar Ráo, attacked the fort, but were beaten off with the aid of a few men from Charkhári.

Maudhunkhalla. — Village and *mutta* in Vizagapatam District, Madras Presidency.—*See* MONDEMKHALLU.

Maulmain (or *Moulmein*).—Town and head-quarters of Amherst Dis-

trict, and of the Tenasserim Division, British Burma; situated on the left bank of the Salwín, at its junction with the Gyaing and Attaran rivers, in lat. 16° 30′ N., long. 97° 38′ E. Immediately to the west is BILU-GYWON, a large island, which protects the town from the monsoon, but shuts out all sea view. To the north, on the opposite bank of the Salwín, is MARTABAN, once the capital of a Burmese kingdom, but now an unimportant hamlet. Low hills, forming the northern extremity of the Taung-ngu range, run north and south through Maulmain, dividing it into distinct and very dissimilar portions, which touch each other at the northern base of the hills on the bank of the Gyaing. These are crowned at intervals with pagodas, in various stages of decay. The town is parcelled out into five 'divisions,' of which four lie to the west; and in this portion are situated the public buildings, the military cantonments, the merchants' offices and warehouses, and the majority of the houses of the European residents. The inhabitants here are almost entirely Europeans, Eurasians, Chinese, and natives of India. The fifth 'division' of Maulmain is behind the hills, in the Attaran valley, and is inhabited mainly by Burmese and Talaings.

The population numbered in 1857, 23,683; in 1872, 46.472; in 1881, 53,107, representing almost every nationality. Of the total population, males number 32,895, and females 20,212. The area over which the town spreads, about 14 square miles, contains 9340 houses, or 690 houses to the square mile, each house containing 5·6 persons on an average. The majority of the inhabitants (28,276) in point of religion are Buddhists; 12,853 are Hindus; 7258 Sunní Muhammadans; 851 Shiá Muhammadans; 4 Wahabí Muhammadans; and 1194 Muhammadans of unspecified sects; 24 Jews; 5 Jains; and 2 Pársís. Christians number 2640, of whom 383 are European British subjects, 53 Americans, 1034 Eurasians, and 1170 Burmese. Of the total population of 53,107, 3041 were in 600 boats and 18 ships.

The principal buildings are—Salwín House, originally a private residence, but now Government property; the hospital; the jail; the Protestant and Roman Catholic churches; the custom-house, and other public offices; the barracks for the garrison of Madras Native infantry. There is also a telegraph office.

When this part of the Province was ceded by the treaty of Yandabu (1826), Amherst was first designated as the capital of the newly acquired territory, but Maulmain was chosen afterwards as being the best site strategically, and also on account of its being well supplied with water. In a few years, Maulmain, from being a waste, developed into a thriving commercial town. It has the usual gold and silver smiths and makers of *niello* work; the gold ornaments, as is generally the case in Burma, being fashioned from the metal procured by melting down English sovereigns. A large trade in teak (of which there are extensive forests

in Amherst District) in a little time sprang up, and for many years timber proved the only article of export. The revenue realized from this source alone, in 1855–56, was £20,635. With the gradual settlement of the country and increase in agriculture, rice and cotton began to be also exported. Besides these, the other staple exports are hides, horns, lead, copper, yellow orpiment, and stick-lac. The principal imports are cotton-twist and yarn, cotton and woollen piece-goods, wines, beer and spirits, sugar, and areca-nuts. Salt manufactured in the District holds its own here as it does nowhere else in the Province.

Total value of exports (1876–77), £921,379—of imports, £994,296; total duty realized on exports and imports, £35,556. In 1881–82, the figures were—total value, exports, £1,390,837; total value, imports, £1,003,976; total duty realized on exports and imports, £39,360. The average annual value of the exports for the five years ending 1882–83, was £1,395,245; and of the imports, £986,528. The number of vessels visiting the port in 1875–76 was 1115, with a gross burthen of 521,555 tons; in 1881–82, the figures were—ships, 1131, tonnage, 554,272. Shipbuilding, commenced in Maulmain as early as 1830, forms an important industry of the town. Burmese female education is particularly advanced in Maulmain, 872 out of every 10,000 women and girls are learning, and 1063 of each 10,000 can read and write. The jail in 1882 held a daily average of 1074 prisoners, the cost of maintenance being £6648. There are four printing presses. The municipal revenue amounted in 1881–82 to £11,721; rate of taxation, about 4s. 4¾d. per head of population. The dispensary and hospital in 1882–83 afforded relief to 696 in-door and 8515 out-door patients. The conservancy system of Maulmain could not be more faulty or dangerous than it is at present. Maulmain town forms a separate jurisdiction distinct from Amherst District. A bi-weekly steam service connects Maulmain with Shwe-gon on the Salwín, and with Duyinseik on the Dondami river.

Maunagar (or *Kánt*).—Town in Amrohá *tahsíl*, Moradábád District, North-Western Provinces; situated in lat. 29° 3′ 30″ N., long. 78° 40′ 15″ E., 17 miles north-west of Moradábád town, and 2 miles east of the Gángan river. Population (1872) 7030; (1881) 6936, namely, Hindus, 4078; Muhammadans, 2851; and Jains, 7. Number of houses, 1212, on an area of 126 acres. Noted for its manufacture of cotton cloth, in which there is a large local trade. Market days, Mondays and Fridays. A small house-tax raised for police and conservancy purposes realized £146 in 1880–81.

Mau Nátbhanjan.—Town in Muhammadábád *tahsíl*, Azamgarh District, North-Western Provinces; situated in lat. 25° 57′ 5″ N., and long. 83° 35′ 40″ E., on the right bank of the Tons river, 14 miles from Muhammadábád town. The place is of greater antiquity than Azamgarh, the District capital, but the date of its settlement has not

been ascertained. It is mentioned in the *Ain-i-Akbari* as the head-quarters of a *parganá;* and during the reign of Sháh Jahán, that Emperor bestowed the town upon his daughter Jahánárá Begam, and it received in a special degree the royal favour. At that time it is said to have contained 84 *muhallás* or wards, and 360 mosques. A great manufacturing industry in cotton cloth was carried on. At the time of the cession to the British, Mau Nátbhanjan was held in *jágír* by one of the Faizábád Begams; but the town had suffered severely from previous misrule, and has never regained its former prosperity. A Commercial Resident was appointed for Mau and Azamgarh in 1802; and in addition to the ordinary country traffic, investments in Mau cloths, chiefly in the kind of long cloth known as *sahan*, were made for many years on behalf of the Company. Private enterprise kept up the trade for a time after the abolition of the Company's monopoly; but the introduction of English-made thread and cloth has given a great blow to it.

The population of Mau Nátbhanjan in 1865 was returned at 10,271; in 1872, at 13,765; and in 1881, at 14,945, namely, males 7612, and females 7333. Area of town site, 261 acres; number of houses, 2144. Classified according to religion, there were in 1881—Hindus, 8019, and Muhammadans, 6926. The population still consists largely of weavers, although numbers of them have taken to shopkeeping and petty trading in addition to their hereditary occupation. The thread that is made in Mau is mostly disposed of at Benares, being used in the mixed silk and cotton manufactures of that place. Considerable quantities of cloth are still made, both for local use and for export chiefly to Western and Central India. In all except the coarsest cloths, however, English thread is used. Silk and *tasar* cloths are manufactured to a small extent. The public buildings include a police station, post-office, Anglo-vernacular school and girls' school, and a military encamping ground. A daily market is held. For police and conservancy purposes, a small house-tax is raised, which realized £230 in 1881–82.

Maundá (*Monda*).—Village in Rámtek *tahsíl*, Nágpur District, Central Provinces; situated in lat. 21° 8′ N., and long 79° 22′ E., on the Kanhán river, half-way between Nágpur and Bhandára. The surrounding estate belongs to Yaswant Ráo Gújar, who has a fort in the village. Population (1881) 3172, namely, Hindus, 2966; Muhammadans, 156; Jains, 35; aboriginal tribes, 15. Maundá has a large market-place, Government school-house, and police office. The population is chiefly employed in manufacturing cotton cloth.

Maung-daw.—Head-quarters of the Naaf township, Akyab District, Arakan Division, British Burma. Contains a court-house, Government cess-school, telegraph office, market-place, and police station. A ferry-boat plies between this town and Chittagong District. Population

(1881) 642. During the first Anglo-Burmese war, Maung-daw was occupied by the British on the 1st of February 1825.

Maung-ma-gan.—Group of islands off the coast of Tavoy District, British Burma.—*See* Moscos.

Mau Ránipur.—Two towns in Mau *tahsíl*, Jhánsí District, North-Western Provinces, but forming a single municipality.—*See* articles Mau and Ranipur.

Mauránwán.—*Parganá* in Púrwa *tahsíl*, Unao District, Oudh. The most easterly *parganá* in the District, separated from Rái Bareli by the Sái river. Soil good, producing excellent rice crops, and well wooded. Population (1869) 90,464; (1881) 80,919, dwelling in 111 villages; average density, 473 persons per square uile. Area, 173 square miles, or 110,538 acres, held as follows:—*Tálukdárí*, 69,363 acres; *zamíndárí*, 15,355 acres; *pattidárí*, 25,820 acres. Land revenue, £12,190, equal to an average rate of 3s. 6d. per acre of total area. The late *tálukdár*, Rájá Gaurí Sankar, a Báis Rájput, received his title and estates (which had escheated from previous members of the family) for loyal service during the Mutiny.

Mauránwán.—Town in Unao District, Oudh, and head-quarters of the *parganá* of the same name; situated 6 miles from Púrwa, and 26 from Unao town. Lat. 26° 25′ 45″ N., long. 80° 55′ 30″ E. Population (1881) 7163, of whom Hindus number 5575, and Muhammadans 1588. Noted for its jewellery and carpentry work. Two mosques and 9 Hindu temples. Bi-weekly markets, attended by about 2000 persons. At an annual fair, sales are made to the extent of about £7000. Police station, *sarái*, school. The town, which is surrounded by groves of mango and *mahuá* trees, is connected by road with Unao and Rái Bareli, and with Lucknow by a cart track leading to the main road.

Maureswar. — Village in Bírbhúm District, Bengal, and head-quarters of a *thánú*; situated in lat. 23° 59′ 5″ N., and long. 87° 48′ 20″ E., on the road from Surí to Murshidábád. The inhabitants are principally engaged in rearing silk-worms, and in silk-spinning and weaving.

Mávalikara. — *Táluk* in Travancore State, Madras Presidency. Area (including Chengenur), 1164 square miles. Mávalikara contains 145 *karas* or villages. Population (1875) 109,191; (1881) 111,731, namely, 55,604 males and 56,127 females, occupying 23,769 houses. Hindus numbered 91,468; Muhammadans, 4524; and Christians, 15,739.

Mávalikara.—Chief town (or more correctly a group of hamlets) of the Mávalikara *táluk*, Travancore State, Madras Presidency; situated in lat. 9° 14′ 32″ N., and long. 76° 35′ 11″ E., 25 miles north of Quilon, and 8½ miles from the coast. Population (1871) 4468; number of houses, 950. Not returned separately in the Census Report of 1881. It bears

signs of having once been a place of some consequence; and has a large and regular fort, built of red stone and mud, about 2 miles in circumference, with 24 bastions, each side having a gateway in the centre. The interior is laid out in neat streets, crossing at right angles, and lined with the gardens and houses of the Nairs, who form a considerable section of the population. In the centre of the fort stands an ancient pagoda. On the east side are several buildings used as public offices; on the south is a spacious *kotáram* where some members of the present Rájá's family reside; towards the north-east, a short distance from the fort, runs a long street of houses, inhabited by Syrian Christians, who have a church at the eastern extremity.

Mawái.—Town in Rám Sanehi *ghát tahsíl*, Unao District, Oudh; situated 15 miles south-east of Púrwá town. Population (1881)—Hindus, 4031, and Muhammadans, 196; total, 4227, residing in 946 houses. A place of little importance, with no manufactures or trade. Founded about two centuries ago by a Rájput named Mán Singh. Two temples; village school.

Mawái Maholára.—*Parganá* in Rám Sanehi *ghát tahsíl*, Bara Banki District, Oudh; bounded on the north by Rudauli and Basorhi, on the east by Khándánsa in Faizábád (Fyzábád) District, on the south by the Gumti river, and on the west by the Kalyáni. Area, 71 square miles, or 45,440 acres, of which 23,897 acres are cultivated. Population (1881)—Hindus, 32,258; Muhammadans, 4781; and 'others,' 1: total, 37,040, dwelling in 51 villages and 7136 houses; average density, 203 persons per square mile. Of the 51 villages, 46 are held under *zamíndárí* tenure, 4 under *pattidárí*, and only 1 under *tálukdárí*. Government land revenue, £5601.

Máwal.—Sub-division of Poona (Puna) District, Bombay Presidency; situated between 18° 36′ and 18° 59′ N. lat., and 73° 26′ and 73° 51′ E. long. Area, 385 square miles, containing 2 towns and 163 villages. Population (1872) 56,844; (1881) 62,383, namely, 31,839 males and 30,544 females, occupying 11,747 houses. Hindus number 58,847; Muhammadans, 1976; and 'others,' 1560. Three leading spurs from the Sahyádri hills cross the Sub-division. The largest passes east and west across its whole length in the south; a second penetrates to the centre, and the third forms the north-eastern boundary for about 20 miles. The Sub-division is fairly wooded. Red and gray are the principal soils; black soil is found only on the banks of rivers and large streams, of which the chief are the Indráyaní and the Andhrá. Rice grows throughout the Sub-division. The rainfall varies greatly in different parts. It is heavy close to the Sahyádris, and considerably lighter near the eastern boundary. Hot winds are almost unknown, and the climate is generally cooler than in the east.

In 1881-82, 111,050 acres were held for tillage, of which 47,125

acres were fallow or under grass, and 27 acres were twice cropped. The principal crops were—grain crops, 54,846 acres; pulses, 3613 acres; and oil-seeds, 5403 acres. The husbandmen are Kunbís, Mhárs, Mángs, Dhángars, Kolís, and Malís. Most of their houses are poor, the walls made of hardened earth occasionally mixed with stone, with sloping roofs generally tiled, and sometimes thatched with reeds and leaves. Nearly 70 per cent. of the cultivating classes are small proprietors, 20 per cent. are mere labourers, and the rest proprietors with sub-tenants. The south-east line of the Great Indian Peninsula Railway and the Bombay road both cross the Sub-division. The villages along or at a short distance from the road derive considerable advantage from the sale of grass for the numerous droves of cart and pack bullocks that daily halt at the different stages. In 1883 the *táluk* contained 1 civil and 2 criminal courts; police circles (*thánás*), 1; regular police, 47 men; village watch (*chaukídárs*), 51. Land revenue, £7631. The head-quarters of the Sub-division are at Khadkála, a small village near the Khadkála station on the south-east line of the Great Indian Peninsula Railway, 30 miles north-west from Poona.

Mawána (*Muwána*).—*Tahsíl* of Meerut (Merath) District, North-Western Provinces, comprising the *parganás* of Kithor and Hastinápur. Area, according to the latest official statistics, 440·53 square miles, of which 264·4 square miles are cultivated. Population (1872) 145,496; (1881) 159,832, namely, males 85,575, and females 74,257; total increase between 1872 and 1881, 14,336, or 9·8 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 122,200; Muhammadans, 37,486; Jains, 145; Christian, 1. Number of villages, 255. Total Government land revenue, £26,852, or including local rates and cesses levied on the land, £31,303; rental paid by cultivators, £55,060. The *tahsíl* contained in 1884, 1 criminal court, with 5 police circles (*thánás*), a regular police force of 58 men, and a village watch of 340 *chaukídárs*.

Mawána (or *Mawána Kalán*).—Town in Meerut (Merath) District, North-Western Provinces, and head-quarters of Mawána *tahsíl*. Lies in lat. 29° 6′ N., long. 77° 57′ 55″ E., on the Doáb upland, 16 miles north-east of Meerut (Merath) city, in the midst of country watered by the Ganges Canal. Population (1872) 6714; (1881) 7219, namely, Muhammadans, 3643, and Hindus, 3576. Agricultural town; bi-weekly market; *tahsíli*, post-office, police station, village school, *sarái*. Large brick-built tank; ruins of another, on whose bank stands a handsome old temple. Pools of water surround the town, and fever prevails after the rains.

Máyakonda.—Village in Davangere *táluk*, Chitaldrúg District, Mysore State. Lat. 14° 17′ 15″ N., long. 76° 7′ 25″ E. Population (1881) 1308. The scene of a decisive battle, fought in 1748 between

caste in the Division, however, are the despised Chamárs, 828,285; the other important castes according to numerical superiority being—

Mayu.—River in Arakan, British Burma; rises in the hills near the northern boundary of Akyab District, and flows with a general northerly and southerly direction into the Bay of Bengal to the north-west of Akyab Island, between the Naaf and Kuladan rivers. Its mouth is about 3 miles broad, but entrance is rendered dangerous by numerous rocks and shoals. The passage used by native boats is in-shore on the northern side.

Mazagon.—Northern suburb of Bombay city, noteworthy as containing the docks and workshops of the Peninsular and Oriental Steam Navigation Company. Lat. 18° 56′ N., long. 72° 53′ E. From their pier, the Company sends on mail days a small steamer with homeward-bound passengers for the mail-steamer. There is a large Portuguese and Hindu population, with a considerable sprinkling of Europeans. Two churches, one Protestant and the other Catholic; also a Catholic school.

Mechi.—River of Bengal, rising under the Rangbang spur in the Singálilá range on the frontier of Nepál. This range forms the water-shed between the Mechi in Dárjíling District, and the Jangbá in Nepál. The Mechi forms the western boundary of Dárjíling District from its source, flowing south till it passes into Purniah. Banks sloping and well cultivated; bed sandy in the plains, and stony in the hills. Fordable throughout the year, except after heavy floods.

Medak.—Town in Haidarábád State (Nizám's Dominions). Lat. 18° 2′ 44″ N., long. 78° 17′ 47″ E. Population (1881) 7026. Medak is built on the northern and eastern sides of a high hill which was at one time strongly fortified. The fortification consisted of two lines of wall, one at the base and the other around the summit of the hill. They are said to have been originally built by one of the Warangal Rájás, from whom the place was afterwards taken by the Bahmani rulers.

Protection to person and property was afforded by 74 civil and revenue judges, and 122 magistrates.

Meerut (or more correctly, *Merath*).—British District in the Lieutenant-Governorship of the North-Western Provinces, lying between 28° 28′ 15″ and 29° 18′ N. lat., and between 77° 10′ 30″ and 78° 14′ E. long. Area, 2379 square miles. Population (1881) 1,313,137. Meerut is a District in the Division of the same name. It is bounded on the north by Muzaffarnagar District; on the west by the Jumna (Jamuná) river, separating it from the Punjab; on the south by Bulandshahr District; and on the east by the Ganges, which separates it from Bijnaur and Moradábád Districts. The administrative head-quarters are at the city of MEERUT.

acres were fallow or under grass, and 27 acres were twice cropped. The principal crops were—grain crops, 54,846 acres; pulses, 3613

females 5772. Classified according to religion, there were in 1881—Hindus, 8919; Muhammadans, 6024; Sikhs, 1436; and 'others' (mainly European troops), 2030. The ordinary garrison of Meean Meer consists of 2 batteries of Royal Artillery, 1 regiment of British infantry, 1 regiment of Bengal cavalry, 1 regiment of Native infantry, and 1 regiment of Punjab pioneers. The fort of Lahore is garrisoned by detachments of artillery and infantry from Meean Meer. The cantonments stand on an open and dreary arid plain, originally bare of trees, but now gradually growing greener as canal irrigation extends, and the avenues of trees now planted along the road-side grow up. Meean Meer is said to have been at one time named Haslimpur. Prince Dárá Shikoh, brother of Aurangzeb, who was put to death by that Emperor on his ascending the throne, was a disciple of a famous Muhammadan saint or *pír*, Mullan Sháh, *alias* Mián Mír. He purchased the village of Haslimpur, and made it over to his religious preceptor, after whom it was re-named, and has ever since been called Meean Meer. The mausoleum of the holy man is a handsome domed building of white marble and red Agra sandstone, with a mosque in the courtyard. Meean Meer is comprised within the limits of Lahore city, but is not included within the municipality. It has two railway stations, one to the east on the line from Lahore to Delhi, and another on the west on the line from Lahore to Múltán.

Meerut (*Merath*).—Division or Commissionership in the Lieutenant-Governorship of the North-Western Provinces, lying between 27° 38′ and 30° 57′ N. lat., and between 77° 7′ and 78° 42′ E. long., and comprising the 6 Districts of DEHRA DUN, SAHARANPUR, MUZAFFARNAGAR, MEERUT, BULANDSHAHR, and ALIGARH, each of which see separately. It is bounded on the north by the Siwálik hills; on the east by the Ganges; on the south by the Muttra and Etah Districts of the Agra Division; and on the west by the Jumna (Jamuná). Area.

North-Western Provinces, and head-quarters of Mawána *tahsíl*. Lies in lat. 29° 6′ N., long. 77° 57′ 55″ E., on the Doáb upland, 16 miles north-east of Meerut (Merath) city, in the midst of country watered by the Ganges Canal. Population (1872) 6714; (1881) 7219, namely, Muhammadans, 3643, and Hindus, 3576. Agricultural town; bi-weekly market; *tahsíli*, post-office, police station, village school, *sarái*. Large brick-built tank; ruins of another, on whose bank stands a handsome old temple. Pools of water surround the town, and fever prevails after the rains.

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caste in the Division, however, are the despised Chamárs, 828,285; the other important castes according to numerical superiority being—Játs, 366,736; Baniyás, 212,899; Gujárs, 199,349; Kahárs, 179,463; Bhangís, 177,898; Lodhís, 102,086; and Korís, 73,746.

The six principal towns in the Division, with their population, are—MEERUT city and cantonment, 99,565; KOIL or ALIGARH, 61,730; SAHARANPUR, 59,194; KHURJA, 27,190; HATHRAS, 25,656; and DEOBAND, 22,116. The total number of towns with upwards of 5000 inhabitants is 68, with an urban population of 800,642, or 15·5 per cent. of the total divisional population. Of the minor towns and villages, 5302 contained less than five hundred inhabitants; 1829 from five hundred to a thousand; 797 from one to two thousand; and 278 from two to five thousand.

The male adult agricultural population in 1881 numbered 1,000,530; of whom 212,686 were returned as landholders, 10,132 as estate agents, 565,384 as cultivators, and 212,328 as agricultural labourers. The total agricultural population dependent on the soil is returned at 2,700,795, or 52·53 per cent. of the entire inhabitants of the Division. Of the total area, 11,320 square miles, 1493 square miles are held rent-free. Of the 9827 square miles assessed for Government revenue, 6738 square miles are returned as under cultivation, 1681 square miles as cultivable, and 1408 square miles as uncultivable waste. Total Government land revenue, including local rates and cesses levied upon the land, £944,520, or an average of 4s. 4⅜d. per cultivated acre. Total rental paid by the cultivators, £1,597,255, or an average of 7s. 2¼d. per cultivated acre.

The total Government revenue of Meerut Division in 1883–84 amounted to £1,127,383, the principal items being—Land revenue, £800,558; stamps, £91,601; excise, £52,363; provincial rates, £98,745; assessed taxes, £26,336; and irrigation and navigation, £10,195. The total cost of civil administration, as represented by the salaries of all officials and police, in 1883–84 was £134,990. Protection to person and property was afforded by 74 civil and revenue judges, and 122 magistrates.

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Physical Aspects.—The District of Meerut forms a portion of the long and narrow plain lying between the Ganges and the Jumna, and known as the Doáb ('Two Rivers'). Like most other Districts of that fertile plateau, it stretches in an almost unbroken level from one great river to the other, with only a gentle slope from north to south. The average elevation above the sea is 730 feet. Though well wooded in places, and abundantly supplied with mango groves, there are but few patches of jungle or waste land to break the general expanse of cultivated soil. Sandy ridges run along the low water-sheds which separate the minor channels, and some uneven ground is to be met with in the sunken and shifting beds of the boundary rivers themselves; but with these exceptions, the whole District is one continuous expanse of careful and prosperous tillage. The barren *úsar* plains, covered with a white saline efflorescence, which prove so great a pest in other regions of the Doáb, are here comparatively rare. The eastern portion of the District, however, near the banks of the Ganges, is characterized by rolling sand-dunes, which continually change their position before the prevailing wind.

Besides the boundary streams of the Ganges and Jumna, Meerut District is intersected by the Hindan, which is only navigable by boats in the rains. The present fertility of Meerut is largely due to the system of irrigation canals, which intersect it in every direction. The Eastern Jumna Canal runs through the whole length of the District, and supplies the rich tract between the Jumna and its affluent the Hindan, with a network of distributary streams. The main branch of the Ganges Canal sweeps across the centre of the plateau in a curve, and waters the midland tract. The Anúp-shahr branch supplies irrigation to the Ganges slope. In addition to these natural and artificial channels, the country is every-where cut up by small watercourses, most of which are dry, except in the rainy season. The Búrh Gangá, or ancient bed of the Ganges, lies at some distance from the modern stream; and on its bank stood the abandoned city of Hastinápur, the legendary capital of the Pándavas. Few remains now mark the site of this Indian Troy, which is said to have been deserted many centuries before the Christian era, owing to the encroachments of the river. But the mythical history of the *Mahábhárata* centres in the town and its neighbourhood, thus giving a peculiar interest to the whole tract in which it stands. The city of Meerut itself, which is also of great though not of equal antiquity, is placed in the very centre of the District, and is connected by railway and road with Delhi, and with all parts of the surrounding country. It has a large European quarter, with extensive cantonments, and a strong military establishment. The District as a whole, however, is rather agricultural than urban,

and the progress of irrigation has made it one of the richest in the Doáb.

History.—No portion of India has a history extending back to so remote a period as the country around Meerut. Even at the early time when the *Mahábhárata* was composed, Hastinápur was already an ancient city, the capital of the Lunar race; and after the great war which forms the main theme of that poem, it was ruled by a long line of the descendants of Parikshit, whose annals are given in the *Vishnu Purána.* Passing on from these heroic ages to the first dawn of authentic history, we learn from the evidence of a pillar, now standing at Delhi, that the town of Meerut was inhabited in the 3rd century before Christ; and the discovery of Buddhist remains leaves no doubt of its great antiquity. But as little reliance can be placed here as elsewhere on any details previous to the first Musalmán invasion. It is probable that until the 11th century of our era, the District was mainly in the hands of predatory native tribes, such as the Játs and Dors; and Hardatta, the Dor Rájá of Baran, in the adjoining District of BULANDSHAHR, seems to have had a fort at Meerut. He was attacked, according to some accounts, by Mahmúd of Ghazní in 1017, and forced to embrace the faith of Islám, besides paying a large sum of money as tribute.

The first undoubted Muhammadan invasion was that of Kutab-ud-dín, the general of Muhammad Ghori, in 1191, when the city of Meerut was taken, and all the Hindu temples were converted into mosques. Under succeeding Sultáns we hear little of the District, which may therefore be considered to have escaped any notable misfortune, until the Mughal invasion in 1398. Timúr swooped down upon Meerut with more than ordinary Mughal barbarity, and was met with equal Hindu obstinacy. At the fort of Loni, many of the Rájputs burnt their own houses, with their women and children within, and then went out to sell their lives as dearly as they could. After the capture, Timúr ordered the massacre of all the Hindu prisoners in his camp, whom he himself represents as numbering 100,000 persons. He then went on to the sack of Delhi, and returned to the town of Meerut, then ruled by an Afghán chief named Iliás. Timúr first made his approaches by mining, and on the second day carried the walls by storm. All the males were put to the sword, and the fortifications and houses of the Hindus razed to the ground. Thence his army passed northward along the two great rivers, taking every fort, town, and village they passed.

The firm establishment of the Mughal dynasty in the 16th century, and the immediate neighbourhood of their court, gave Meerut a period of internal tranquillity and royal favour. The valley of the Jumna became a favourite hunting resort for the imperial family and

their great officers. Pleasure gardens and game preserves were established in the low-lying tract just opposite Delhi; while it was for the purpose of watering one of these that the Eastern Jumna Canal was first designed. After the death of Aurangzeb, Meerut was exposed to the same horrors of alternate Sikh and Maráthá invasions which devastated the other Provinces of the Upper Doáb; while the Játs and the Rohillás occasionally interposed, to glean the remnant of plunder which remained from the greater and more fortunate hordes.

From 1707 till 1775, Meerut was the scene of one perpetual strife; and it was only rescued from anarchy by the exertions of a European military adventurer, Walter Reinhardt, one of the many soldiers of fortune who were tempted to try their destinies in Upper India during the troubled decline of the Delhi dynasty. Reinhardt established himself at Sardhána, one of the northern *parganás* of Meerut; and on his death in 1778, left his domains to his widow, generally known as the Begam Samru, from the assumed name of her husband. This remarkable woman was of Arab descent, and originally followed the trade of a dancing girl. After her marriage with Reinhardt, she was baptized into the Roman Catholic Church, to which she became a considerable benefactress. Meanwhile, the southern portion of the District still remained in its anarchic condition under Maráthá rule, until the fall of DELHI in 1803, when all the country between the Jumna and the Ganges was ceded by Sindhia to the British. The Begam, who had up till that time given active assistance to Sindhia, thereupon made submission to the new Government, to which she remained constantly faithful till her death in 1836.

The *parganás* now constituting the District of Meerut were at first divided amongst the surrounding Districts, but were afterwards attached to Saháranpur. In 1818, Meerut was formed into a separate District, which was further sub-divided in 1824 by the removal of Bulandshahr and Muzaffarnagar. With the exception of these administrative changes, Meerut has few historical incidents to show during the early British period. But it has been rendered memorable by the active part which it took in the Mutiny of 1857, being the place where the first outbreak occurred. From the beginning of the year, disquieting rumours had been afloat amongst the native troops, and the greased-cartridge fiction had spread widely through their ranks. In April, a trooper named Brijmohan informed his comrades that he had used the new cartridges, and that all would have to do so shortly; but within a few days, Brijmohan's house was set on fire, and from that time acts of incendiarism became common. On the 9th of May, some men of the 3rd Bengal cavalry, who had refused to use the cartridges, were condemned to ten years' imprisonment. Next day, Sunday, May

the 10th, their comrades took the fatal determination to mutiny; and at 5 P.M., the massacre of Europeans in the city began.

The subsequent events belong rather to imperial than to local history, and could not be adequately summed up in a brief *résumé*. It must suffice to say that, throughout the Mutiny, the cantonments remained in the hands of the British forces, and the District was on the whole kept fairly clear from rebels. Meerut was more than once threatened by Walidád Khán, the rebellious chieftain of Málágarh in Bulandshahr District, but his demonstrations were never very serious. Indeed, it is a noticeable fact that the very city where the Mutiny broke out, and where the first massacre took place, was yet held by a small body of Europeans, surrounded by hundreds of thousands of disaffected natives, under the very shadow of Delhi, from the beginning to the end of that desperate struggle.

Population. — The first enumeration of the people which can be employed for purposes of comparison was that taken in the year 1853, all previous statistics being rendered useless by subsequent administrative changes. The population was then returned at 1,135,072. At the Census of 1865, the number was stated as 1,211,281, or 513 persons to the square mile. In 1872 the population numbered 1,276,167, or 541 persons to the square mile. The last Census in 1881 returned the population of Meerut District at 1,313,137, showing an average density of 551·9 per square mile. The foregoing figures (assuming the data for the earlier years to be as correct, or nearly so, as the last enumeration) show that the population of Meerut District increased by 76,209, or 6·3 per cent., in the twelve years between 1853 and 1865; by 64,886, or 5·1 per cent., in the seven years between 1865 and 1872; and by 36,970, or 2·8 per cent., in the nine years between 1872 and 1881. Total increase between 1853 and 1881, 178,165, or 15·6 per cent. in twenty-eight years.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 2379 square miles, with 21 towns and 1517 villages, and 150,259 houses. Average density of population, 551·9 persons per square mile; towns or villages per square mile, ·64; persons per town or village, 853; number of houses per square mile, 63; inmates per house, 8·7. Total population, 1,313,137, namely, males 705,437, and females 607,700; proportion of males, 53·87 per cent. The excessive proportion of males is doubtless due to the prevalence of female infanticide; but the Act of 1870 has been put in force in certain villages of the District, and is working well for the suppression of this practice. Classified according to age, there were, under 15 years of age—boys 246,964, and girls 204,997; total children, 451,961, or 34·4 per cent. of the District population: above 15 years —males 458,473, and females 402,703; total adults, 861,176, or 65·6

per cent. As regards religious distinctions, the population was classified as follows in 1881:—Hindus, 997,812, or 75·9 per cent.; Muhammadans, 294,656, or 22·4 per cent.; Jains, 16,453; Christians, 4063; Sikhs, 152; and Pársí, 1.

Of the four great classes into which the Hindus are divided, the Bráhmans are numerous and important. In 1881 they numbered 103,862, and held 76 villages as *zamíndárs*. By far the greater portion of them belong to the Gaur division of the sacred class. The Rájputs amount in all to 44,371; but they enjoy great social distinction as landowners. The Hindu Rájputs are *zamíndárs* in 194 villages; while Musalmán families of the same stock hold 48 more. Their principal sub-divisions in Meerut are the Chauháns, Gahlots, and Tuárs. The third great class, that of the Baniyás or traders, is returned at 51,162. A large number of them are Jains in religion. They now hold considerable landed property, being *zamíndárs* of 136 villages.

The great mass of the population belongs to those lower tribes classed together in the Census reports as 'other castes.' These show an aggregate of 798,417, or 80 per cent. of the total Hindu inhabitants. The Chamárs are the most numerous caste, amounting to 204,828 persons, for the most part agricultural labourers. The Játs, who are returned at 144,034, are the most industrious and enterprising class of cultivators, both in Meerut itself and throughout the Division, and they have influenced the character of the neighbouring country more than any other caste. They hold no fewer than 488 villages in this District. The Gujárs, a tribe of unsettled habits, having a taste for jungle life and pastoral occupations, with which they are said to combine a little plundering and cattle-lifting, number 63,113, and hold 209 villages. Their hereditary character of robber clans is passing away under the influence of canal irrigation and agricultural improvement. The other chief Hindu castes are the Tágas (42,563), Kahárs (40,357), Bhangís (54,097), Kumbhárs (25,172), Náis (19,546), Ahírs (16,428), Málís (17,333), Gadárias (15,170), Korís (12,175), Barhais (11,685), Sonárs (7742), Lodhís (7489), Kathiks (6886), Gosáins (5946), Kachhís (5719), and Lohárs (5288).

The Musalmáns, who number 294,656, or 22·4 per cent. of the District population, are for the most part the descendants of converted Hindus, holding altogether 337 villages in Meerut. These converted Muhammadans include 19,374 Rájputs by race, 12,350 Tágas, 1598 Mewátis or Meos, 1458 Játs, and 167 Gujárs. The District also contained 2162 European residents in 1881, and 780 Eurasians. The number of native Christians is returned at 1121; many of them are Roman Catholics, who were converted in the household of Begam Samru.

Division of the People into Town and Country.—The Census returns

the following 20 towns as containing upwards of five thousand inhabitants:—MEERUT city and cantonment, 99,565; SARDHANA, 13,313; HAPUR, 13,212; GHAZIABAD, 12,059; BARAUT, 7956; GARHMUKHTESAR, 7305; MUWANA, 7219; BHAGPAT, 7205; KHEKRA, 6972; SHAHDERA, 6552; TIKRI, 6274; CHAPRAULI, 6115; BAOLI, 5990; PILKUWA, 5661; KIRTHAL, 5516; NIRPARA, 5524; SARURPUR, 5374; LAWAR, 5258; PARICHHATGARH, 5182; and PHALANDA, 5163. These towns contain an aggregate population of 237,415, or 18 per cent. of the total District population, leaving 1,075,722, or 82 per cent., as representing the rural population. The Census Report thus classifies the 1518 minor towns and villages:—303 contain less than two hundred inhabitants; 473 from two to five hundred; 408 from five hundred to a thousand; 243 from one to two thousand; 61 from two to three thousand; and 30 from three to five thousand inhabitants. As regards occupation, the male population are divided into the following six classes:—(1) Professional class, including all Government officials, 18,324; (2) domestic class, including inn and lodging-house keepers, 3877; (3) commercial class, including bankers, traders, and carriers, 13,736; (4) agricultural and pastoral class, including gardeners, 262,128; (5) industrial class, including all manufacturers and artisans, 137,435; (6) indefinite and non-productive class, comprising general labourers, men of rank and property without occupation, and male children, 269,937.

Agriculture.—Meerut is one of the most flourishing and best tilled Districts of the Doáb. Of a total area of 2379·2 square miles, 1670 square miles are returned as under cultivation; 356·4 square miles as available for cultivation, but not under tillage; 300·4 square miles as uncultivable waste; and 52·4 square miles as non-assessed or revenue-free. At the beginning of the present century, the poorer crops, such as millets and pulses, formed the staple agricultural products; but these have now been largely abandoned for the superior cereals, besides sugar-cane, cotton, and indigo. The year is divided into the usual *rabí* and *kharíf* harvests. The *rabí* or spring crops comprise wheat, barley, oats, gram, *arhar*, *channa*, safflower, mustard-seed, tobacco, oil-seeds, and a variety of vegetables and other garden produce. The *kharíf* or autumn harvest include Indian corn, *joár*, *bájra*, *urd*, *moth*, cotton, sugar-cane, rice, *til*, *san*, etc. The staple *kharíf* crop is sugar-cane. The crop area of the two great harvests is about equally divided. The area under each in 1883 is returned as follows:—*Rabí* or spring harvest—food crops, 639,830 acres; non-food crops, 11,625 acres: total, 651,455 acres. *Kharíf* or autumn harvest—food crops, 323,958 acres; non-food crops, 299,435 acres: total, 623,393. Extra crops, belonging to neither harvest, 7369 acres. Grand total of crop area, 1,282,217 acres. Deducting from this total 198,592 acres for

land bearing a double harvest in the year, there remain 1,083,625 acres as representing the area actually cultivated.

In irrigated land, producing two crops a year, about one-third of each holding lies fallow for one of the two agricultural seasons; but in unirrigated land, only a single crop a year is produced from each plot. The average out-turn of grain is from 8½ to 10 *maunds*, or from 6 to 8 cwts. per acre, valued at £1, 16s.; that of cotton is 3½ *maunds*, or 2½ cwts. per acre, valued at £1, 6s. Manure is very generally applied, and the supply is ample. Irrigation is carried almost to its utmost profitable limit, 197,673 acres having been watered from wells, 5227 acres from tanks, and 321,724 acres from canals in 1881. There was thus a total irrigated area of 524,624 acres, leaving a margin of only 559,001 acres dependent upon the precarious rainfall; and it is doubtful whether any good results would ensue from supplying the sandy tracts which compose the latter portion with a flush of water.

The condition of the agricultural labourers has greatly improved of late years; from being mere serfs attached to the soil, they have risen to the position of an independent peasantry. Many of them are, however, never out of debt from the time they make their start in life to their death, owing to the enormous rate of interest exacted by the *mahájans*. Artisans and workmen in the towns have also bettered their condition, though in the villages they are less well off than formerly. Of the total male adult agricultural population in 1881, 75,257 were returned as landholders, 436 as estate agents, 141,175 as cultivators, and 41,353 as agricultural labourers; total, 258,221, giving an average of 4·22 acres of cultivated land to each. The total agriculturists, however, dependent on the soil, number 685,501, or 52·40 per cent. of the District population. The land tenures are of the same kinds as in other Doáb Districts, namely, *zamíndárí*, *pattidárí*, and the minutely sub-divided *bháyachára*. The only *táluk*, or large estate, in the District is that of Paríchhatgarh, comprising six villages in *parganá* Kithor. About one-half the soil is cultivated by the proprietors themselves; the remainder is almost equally divided between tenants-at-will and those with rights of occupancy. Many of the labouring class also till small patches of land on their own account, and only hire themselves out to eke out the resources of their own cultivation. Women and children are largely employed in field labour. The Ját women, with their families, work on their husband's lands, and to this the flourishing condition of the Játs as a community is to be attributed.

The total amount of the Government land assessment, including local rates and cesses levied on the land, is returned at £254,125, or an average of 4s. 1d. per cultivated acre; total amount of rental actually paid by cultivators, £433,872, or an average of 7s. 11½d. per cultivated acre. Rents are paid in money, and depend greatly on the

facility of irrigation; the best canal-watered lands bring as much as 18s. 10d. per acre, while 'dry' lands let at as little as 2s. 5½d. per acre; the average of all soils may be taken at about 8s. Wages and prices are both greatly on the increase. Coolies earn more than double the ordinary rates in 1858. Agricultural labourers are chiefly paid in kind; when paid in money, they get from Rs. 3 to Rs. 4, or 6s. to 8s. a month. Women and children receive wages at half rates. Bricklayers receive from 6d. to 7½d.; carpenters and blacksmiths, 7½d.; and unskilled artisans, 3d. to 3¾d. per diem. In 1876, prices ruled as follows:—Wheat, 26 *sers* per rupee, or 4s. 4d. per cwt.; barley, 33 *sers* per rupee, or 3s. 5d. per cwt.; gram, 25 *sers* per rupee, or 4s. 6d. per cwt. In 1883–84, prices ruled as follows:—Wheat, 18 *sers* per rupee, or 6s. 3d. per cwt.; barley, 26½ *sers* per rupee, or 4s. 3d. per cwt.; gram, 25½ *sers* per rupee, or 4s. 5d. per cwt.; *bájrá*, 23 *sers* per rupee, or 4s. 10d. per cwt.; *joár*, 26 *sers* per rupee, or 4s. 4d. per cwt.

Natural Calamities.—The District of Meerut may be considered safe from the extreme miseries of famine, so far as human calculation can foresee, owing to its very perfect system of irrigation, and the completeness of its communications by road and railway. During the last great drought in 1868–69, Meerut was able not only to supply its own domestic wants, but also to export an amount of grain estimated at about half a million of *maunds*, or 360,000 cwts., for the relief of the distressed Districts. Though the quantity of food-stuffs thus abstracted naturally caused a great rise in prices, there was no conspicuous suffering in Meerut; and the people showed their comparative security by the fact that they did not apply for employment at the relief works experimentally established by Government in various local centres. The highest prices reached during the scarcity were quoted in December 1869, when wheat sold at 10 *sers* the rupee, or 11s. 2¼d. per cwt., and rice at 9 *sers* the rupee, or 12s. 5¼d. per cwt. Floods occasionally cause damage in the low-lying lands near the great boundary rivers, but their extent is inconsiderable.

Commerce and Trade, etc.—The exports of Meerut consist mainly of the raw products of the country; grain, cotton, and indigo being the chief items. The imports are English hardware, Manchester goods, tobacco, drugs, and spices. The manufactures are few and of merely local importance, with the exception of the indigo dye, which is produced in very large quantities. Meerut and Gháziábád are the principal commercial centres, but the sugar trade is concentrated at Bágpat. The District is admirably supplied with means of communication by which its surplus agricultural produce can be exchanged for the manufactured articles of other regions. Besides the great water-ways of the Ganges, the Jumna, and the navigable canals, the East Indian Railway enters the District on the south, and has its terminus at Gháziábád,

whence a branch line runs to Delhi; while the Punjab and Delhi Railway continues the central trunk line past Meerut city and cantonments into the District of Muzaffarnagar, having a total length of 57 miles within the District, with four stations. In addition to these great connecting trunks, the District has 541 miles of roads of all classes, the first-class roads being metalled and the others bridged throughout. Navigable rivers and canals afford 48 miles of water communication.

There are 23 printing presses in the District, 4 of which are in the cantonments. In 1884, 7 newspapers were printed in Urdu at native presses in Meerut—namely, the *Lawrence Gazette*, *Jalwátúr*, *Akbar Alam*, *Jut-i-Hind*, *Islámiá Akbar*, *Sháhna Hind*, and *Weekly Advertiser*.

Administration.—The ordinary administrative staff of Meerut comprises the Commissioner of the Meerut Division, a Civil and Sessions Judge, a Magistrate and Collector, with three covenanted Assistants, 2 Deputy Collectors, 6 *tahsíldárs*, subordinate judge, 2 *munsifs*, superintendent of police, superintendent of central jail, cantonment magistrate, civil surgeon, inspector of education, chaplain, and 4 honorary magistrates, besides a very large military establishment.

In 1804, the total revenue of the District was £25,074, and the expenditure £14,110. By 1860, the revenue had risen to £245,948, while the expenditure amounted to £113,675. In 1870, the receipts were returned at £320,502, of which £211,810, or nearly two-thirds, was derived from the land-tax. By 1884, the total revenue of the District had slightly decreased to £308,411, while the land revenue had slightly risen to 219,665. The other chief items of receipt in 1883–84 were—stamps, £24,290; excise, £18,230; provincial rates, £26,894; assessed taxes, £7091; and registration, £1973. In 1883, the District was in charge of 4 covenanted civilians, and contained 23 magisterial and 16 civil courts. In 1883, the regular police numbered 1382 men of all ranks, of whom 511 were municipal and 153 cantonment police, maintained at a total cost of £13,316, of which £8530 was paid from imperial, and £4786 from other sources. This force was supplemented by 2260 village watchmen or *chaukídárs*, the cost of whose maintenance amounted to £8258. The total machinery, therefore, for the protection of person and property consisted of 3642 men, being 1 man to every 360 inhabitants and every ·65 square mile; and the sum expended upon the establishment was £21,574, or 3¾d. per head of the population. Meerut contains 2 jails, one of which is central, while the other is special to the District. The central jail contained an average daily number of 866·69 prisoners in 1883; the average cost per prisoner being £8, 16s., while the average earnings of each inmate were £1, 9s. 4½d. The District jail contained 237·86 prisoners; the cost per prisoner was £4, 11s. 1½d., and the average

earnings, £2, 4s. 1½d. The Meerut lock-up or subsidiary prison in the same year contained a daily average of 50·25 inmates.

Education is making steady advances. In 1860, there were 413 schools, Government and private, with a total of 7567 pupils, maintained at a cost of £3336. By 1870, while the number of such schools had declined to 370, their increased efficiency was shown by the return of pupils, which stood at 7919; and the cost of their maintenance had risen to £5363. In 1875, the number of schools had increased to 416, the pupils numbered 9616, and the total cost was £5954. In 1883-84, there were 209 State-inspected schools in the District, attended by 7221 pupils; but no returns are available showing the number of private and uninspected indigenous schools in that year. The Census Report for 1881, however, returns a total of 10,011 boys and 561 girls as under instruction, besides 39,139 males and 972 females able to read and write, but not under instruction. The District is divided into 6 *tahsíls* and 16 *parganás*, with an aggregate in 1870 of 2046 estates, owned by 94,208 registered proprietors or coparceners; the average land revenue paid by each estate being £88, 4s. 4½d., and that contributed by each coparcener, £1, 18s. 3¾d. In 1883-84, the number of separate estates was 2201, each paying an average land revenue assessment of £99, 11s. 7d. There are 8 municipal towns in the District—namely, MEERUT, GHAZIABAD, BAGPAT, BARUT, SHAHDARA, HAPUR, PILKHUA, and SARDHANA. In 1883, their aggregate income amounted to £18,854; the incidence of municipal taxation was at the rate of 1s. 4½d. per head of their population.

Medical Aspects.—The comparatively high latitude and elevated position of Meerut make it one of the healthiest Districts in the plains of India. From November to March, the weather is cool and invigorating, hoar-frost being frequently found in January at an early hour of the day. The hot westerly winds begin in April, and the rains set in about the end of June; during their continuance, the weather is sultry and exhausting. Mean temperature—January, 57° F.; February, 67°; March, 73°; April, 82°; May, 86°; June, 87°; July, 84°; August, 84°; September, 85°; October, 79°; November, 69°; December, 59°: annual mean, 76·7°. In 1883-84, the maximum temperature at Meerut was 111·6° in May; minimum, 35·7° in February: mean, 75·1° F. The average annual rainfall for a period of 30 years ending 1881 was 28·13 inches. In 1883-84, a year of deficient rainfall, only 13·60 inches fell, or 14·53 inches below the average. The only endemic disease in the District is malarial fever; but small-pox and cholera occasionally visit it as epidemics. The number of deaths recorded in 1883 was 39,630, of which 33,947 were assigned to fever. The death-rate was 30·77 per thousand in 1883, as

against an average of 46·46 per thousand for the previous five years. Eight hospitals and charitable dispensaries afforded medical relief to 1414 in-door and 71,517 out-door patients during the year 1884. [For further particulars regarding Meerut, see the *Settlement Report of the District*, by Mr. Forbes, C.S., and Mr. J. S. Porter, C.S. (1874). Also the *Gazetteer of the North-Western Provinces*, volume iii. Meerut Division, part ii. 195–438, by Mr. E. T. Atkinson, C.S. (Allahábád Government Press, 1876); the *Census Report of the North-Western Provinces and Oudh* for 1881; and the several Administration and Departmental Reports from 1880 to 1884.]

Meerut (*Merath*).—Central northern *tahsíl* of Meerut District, North-Western Provinces, co-extensive with Meerut *parganá*, and consisting of a level cultivated plain, watered by the Ganges Canal, and traversed by the Sind, Punjab, and Delhi Railway. The Kálí Nadi intersects the *tahsíl* from north to south. The soil is generally of a remarkably fertile quality. Water lies close to the surface, and wells are made at a trifling cost. The Ganges Canal flows through the west of the *tahsíl;* and the whole tract between the Hindan, which forms the western boundary of the *tahsíl*, and the Kálí Nadi, is more or less completely irrigated from it. The opening of the canal has given an immense impetus to the cultivation of sugar-cane. No less than 10 per cent. of the whole cultivated area is under sugar; 31 per cent. is under wheat, and 7 per cent. is sown with cotton. Area, 366·56 square miles, of which 264·2 square miles are cultivated. Population (1872) 277,089; (1881) 291,170, namely, males 158,590, and females 132,580; total increase since 1872, 14,081, or 4·8 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 206,798; Muhammadans, 79,826; Jains, 1219; and 'others,' 3327. Number of towns and villages, 280, of which 132 contained less than five hundred inhabitants. Government land revenue, £41,044, or including rates and cesses levied on land, £47,870. In 1884, the *tahsíl* contained 4 civil and 10 criminal courts (including the District head-quarters courts), 6 police circles (*thánás*), a regular police force 105 strong, and a village police of 571 *chaukídárs*.

Meerut (*Merath*).—City, military cantonment, municipality, and administrative head-quarters of Meerut District, North-Western Provinces, being the sixth town in order of population of all the towns in those Provinces, or the seventh including Lucknow in Oudh. It is situated in lat. 29° 0′ 41″ N., and long. 77° 45′ 3″ E., about half-way between the Ganges and the Jumna, distant 25 miles east of the former and 29 miles west of the latter. Approached by the Grand Trunk Road, and by the Sind, Punjab, and Delhi Railway, which has stations at the city and cantonments. The city proper lies south of the cantonments,

and was originally surrounded by a wall and ditch, pierced with nine gates, eight of which possess considerable antiquity.

Though a very ancient town, dating back as far as the period of the Buddhist Emperor Asoka (one of whose monolithic columns, originally erected here, now stands on the Ridge at Delhi), Meerut owes its principal importance to its selection by the British Government as the site of a great military station. In 1805, it is mentioned as 'a ruined depopulated town, and a place of no trade.' In 1806, cantonments were first established; and the population rose rapidly to 29,014 in 1847, and 82,035 in 1853. In 1881, the population of Meerut city, exclusive of cantonments, was 60,948, namely, Hindus, 31,957; Muhammadans, 28,140; Jains, 613; Christians, 225; and 'others,' 13. The cantonment contained a population of 38,617, namely, Hindus, 24,231; Muhammadans, 11,003; Jains, 404; Christians, nearly all European troops, 2864; and 'others,' 115. Total population of city and cantonments, 99,565, namely, Hindus, 56,188; Muhammadans, 39,143; Jains, 1017; Christians, 3089; and 'others,' 128. Area of city site, 5912 acres, and of cantonment, 2815 acres.

Among the antiquarian remains of Meerut may be mentioned—the Suraj Kúnd, or 'Sun tank,' constructed in 1714, and surrounded by numerous small temples, sanctuaries, and *sati* pillars; the Dargah of Sháh Pír, a fine structure of red sandstone, erected about 1620 by Núr Jahán, wife of the Emperor Jahángír; the Jamá Masjid, or 'chief mosque,' built in 1019 by Hassan Mahdi, Wazír of Mahmúd of Ghazní, and repaired by Humáyún, near which the remains of a Buddhist temple have recently come to light; and the mausoleums of Abu Muhammad Kamboh (1658), Sálar Masáúd Ghází (1194), and Abu Yar Khán (1577). Most of the streets have a poor appearance, due to the hasty manner in which they were erected. The cantonments stand north of the city, at a little distance, and contain 5 *bázárs*. The Meerut church, completed in 1821, is the most remarkable building, having a handsome high spire, which can be seen from the outer spurs of the Himálayas. There are also a Roman Catholic church and mission chapel, an asylum for the relief of Europeans and Christians in distress, and a club. The Mall is one of the finest drives in India.

In 1883 the garrison consisted of 3 batteries of horse artillery, 2 batteries of field artillery, 1 regiment of European cavalry, 1 of European infantry, 1 of Native cavalry, and 1 of Native infantry. Meerut forms the military head-quarters of a Division, comprising the garrisons at Delhi, Agra, Fatehgarh, Muttra, Dehra Dun, Landaur, Rúrki, and Chakráta. The health of the city and cantonments, though good, has apparently suffered from the rise of water level due to the Ganges Canal. The town possesses considerable trade, but cannot be

regarded as a great commercial centre, being mainly employed in ministering to the wants of the troops and European residents. A large fair, said to be one of the best of its kind in the North-Western Provinces, is held at Meerut in the spring, a week after the *Holi* festival. Municipal revenue in 1875–76, £6867; from taxes, £3558, or 1s. 4⅜d. per head of population (51,991) within municipal limits. By 1883–84, the municipal revenue had increased to £9810, of which £7965 was derived from taxation; average incidence of taxation, 2s. 7¼d. per head of population (60,948) within municipal limits.

Meghásani ('*The Seat of Clouds*').—One of the chief mountain peaks in the Native State of Morbhanj, Bengal. Lat 21° 37′ 58″ N., long. 86° 23′ 30″ E.: height, 3824 feet.

Meghná.—The great estuary of the Bengal Delta, which conveys to the sea the main volume of the waters of both the GANGES and the BRAHMAPUTRA. The name is properly applied only to the channel of the old Brahmaputra, from Bhairab *bázár* downwards, after it has received the Surmá or Barák from Sylhet; but some maps mark the head-waters of the Meghná as a small stream meandering through the centre of Maimansingh District, and joining the Brahmaputra near Bhairab *bázár*. At the present time, the main streams of the Brahmaputra or JAMUNA and of the Ganges or PADMA unite at GOALANDA, and enter the estuary of the Meghná opposite Chándpur. The Meghná proper, throughout its entire course, which runs almost due south, constitutes an important political boundary between the two halves of Eastern Bengal. On the right or west bank, proceeding down stream, lie the Districts of Maimansingh, Dacca, Farídpur, and Bákarganj; on the left or east, the Districts of Tipperah and Noákhálí. It nowhere flows within clearly defined banks; and it enters the sea by four principal mouths, enclosing the three great islands of DAKSHIN SHAHBAZPUR, HATIA, and SANDWIP.

The general characteristics of the Meghná are everywhere the same —a mighty rolling river, of great depth and turbidness, sometimes split up into half a dozen channels by sandbanks of its own formation, sometimes spreading out into a wide expanse of water which the eye cannot see across. It is everywhere subject to tidal action, and exhibits the phenomenon of the 'bore' on a grand scale. It is navigable by native boats of the largest burthen, and also by river steamers all the year through; but the navigation is difficult and sometimes dangerous. At low tide, the bed is obstructed by shifting sandbanks and by 'snags' or trees stuck fast in the bottom. When the tide is high, or when the river is in flood, and especially when the monsoon is blowing, the surface often becomes too boisterous for heavy-laden river craft to float in safety. The most favourable season for navigation is between November and February; but even in those months the native boatman

fears to continue his voyage after nightfall. Alluvion and diluvion are constantly taking place, especially along the seaboard, where the antagonistic forces of river and ocean are ever engaged in the process of land-making. In Noákhálí District, the mainland is said to have advanced seawards 4 miles within twenty-three years; while the islands fringing the mouth are annually being cut away and re-deposited in fresh shapes. For some years past, the Meghná has shown a tendency to shift its main channel gradually towards the west.

The tidal phenomena of the Meghná surpass those of any other Indian river. The regular rise of the tide is from 10 to 18 feet; and at springs, or at every full and new moon, the sea rushes up in a single wave, known as the 'bore.' On the Meghná, the 'bore' is no mere spectacle for admiration, but a justly dreaded danger to boatmen. It may be witnessed in its greatest development at the time of the equinoxes, when navigation is sometimes impeded for days together, especially when the wind blows from the south. Before anything can be seen, a noise like thunder is heard seawards in the far distance. Then the tidal wave is suddenly beheld, advancing like a wall topped with foam, of the height of nearly 20 feet, and moving at the rate of 15 miles an hour. In a few minutes, all is over; and the brimming river has at once changed from ebb to flood tide.

A still greater danger than the 'bore' is the 'storm-wave,' which occasionally sweeps up the Meghná in the wake of cyclones. These 'storm-waves,' also, are most liable to occur at the break of the monsoons in May and October. In the cyclone of May 1867, the island of Hátia was entirely submerged by a wave which is estimated to have reached a height of 40 feet. But the greatest of these disasters within the memory of man is that which occurred on the night of 31st October 1876. Towards evening of that day, the wind had gradually risen till it blew a gale. Suddenly, at about midnight in some places, and nearer dawn in others, the roar of the 'bore' was heard, drowning the noises of the storm. Two and three waves came on in succession, flooding in one moment the entire country, and sweeping before them every living thing that was not lucky enough to reach a point of vantage. The destruction of human life on that memorable night is credibly estimated at 100,000 souls in the mainland portion of Noákhálí District and the two islands of Sandwíp and Hátia, or about 19 per cent. of the total population. As usually happens in such cases, the mortality subsequently caused by cholera and a train of dependent diseases equalled that due directly to drowning. A full account of this calamity will be found in the *Statistical Account of Bengal*, vol. vi., Appendix.

Mehar.—Sub-division of Shikárpur District, Sind, Bombay Presidency; situated between 26° 52′ and 27° 26′ 30″ N. lat., and between 67° 11′ and 68° 15′ E. long. Area, 1525 square miles. Population

(1881) 152,320. Bounded on the north by Lárkhána; on the east by the Indus; south by the Sehwán Sub-division of Karáchí (Kurrachee) District; and west by Khelát. Extreme length, 45 miles; breadth, 32 miles.

Physical Aspects. — With the exception of the extreme western portion, which is mountainous and contains peaks 6000 feet high, the country is a flat plain intersected by the WESTERN NARA CANAL. The tract between this stream and the Indus is very fertile, and fairly wooded. Patches of *kalar* or saline waste occur at places. The Indus supplies all the canals in this Sub-division, the principal of which are—the Western Nárá, 71 miles long; the Wahurwáh, 30 miles long, tapping the Indus at Chána, and joining it again near Sítá; the Marui, Kudan, and other minor branches. Numerous hill torrents are also utilized for irrigation purposes. Under the hills, the land is very favourable for cotton; and it is estimated that 300,000 acres are suitable for the cultivation of this important staple. The only Government forest is the Magsi, with an area of 1483 acres. *Bábul, ním, sissu,* almond, and medlar trees abound. Alum is found in the Khirthar range to the west of Mehar.

Population.—The total population of Mehar Sub-division was returned in 1872 at 142,305. In 1881 the population numbered 152,320, namely, 81,665 males and 70,655 females, dwelling in 274 towns and villages, and occupying 23,623 houses. Muhammadans numbered 130,085; Hindus, 10,387; Sikhs, 11,782; Christians, 36; Jews, 4; and aboriginal tribes, 26. The average of persons per square mile is 99·8. The chief towns are MEHAR and KHAIRPUR NATHESHAH. Eight fairs are held in the Sub-division, that of Nango Sháh being the most numerously attended.

There are two sanitaria in Mehar, viz. Dhar Yáro and the Danna Towers. The former is situated in lat. 27° 20′ N., and long. 67° 17′ E., on the Khirthar range, distant 70 miles west from Lárkhána. It is surrounded by lofty peaks, and sheltered on all sides; but the hot winds which blow in the plains during the summer would make the journey extremely hazardous for an invalid. The Danna Towers stand at an elevation of 4500 feet, on a plateau of the Khirthar mountains, about 50 miles south-west of Mehar town. The scenery is highly picturesque. About 3 miles to the south-west is the little river Herár, containing abundant supplies of water. The lofty crags overhanging the valley are studded with flowers and ferns. The general aspect of the hills is wild and barren, but thousands of sheep and goats find pasturage among the stunted vegetation. The atmosphere is very clear and buoyant, and the climate uniform. The only hot months are June and July. The present accommodation at the Towers is inadequate.

Agriculture.—The *kharíf* crops, sown in June and reaped in October,

include *joár*, *bájra*, rice, oil-seeds, and various vegetables. The *rabi* crops, sown in November and reaped in May, comprise wheat, barley, gram, tobacco, and *matar*. The *peshras* crops, sown in February and reaped in September, include cotton, sugar-cane, indigo, and vegetables. Irrigation is mainly effected from wells and canals. Cultivation in *baráni* or rain-land is carried on in the tract lying near the western chain of hills. The entire area of cultivable land held in *jágír* is 61,508 acres, that of uncultivable waste being still larger. In 1882–83, the area assessed to land revenue was 204,060 acres; the area actually cultivated, 191,474 acres. The average assessment on Survey cultivable land in the 3 *táluks* of Mehar Sub-division is—in Kakar, 3s.; in Mehar, from 1s. 7½d. to 3s. 3d.; and in Nasírábád, 3s. 6d. The new settlement was introduced between the years 1867–68 and 1870–71. Mehar is subject to frequent floods from the western Nárá, which at times destroy the rice crops.

Manufactures, Commerce, etc.—The chief manufacture is coarse cloth. Considerable quantities of grain are exported by the Indus to Haidarábád and other places. There are in all about 300 miles of road in the Sub-division, of which the principal line is that from Lárkhána Sub-division, nearly north and south through Mehar, and on to Sehwán. Postal lines of communication run from Radhan station on the Sind, Punjab, and Delhi Railway to Mehar and Wárah; from Mehar to Khairpur, and thence to Kakar. The number of ferries is 31, of which 10 are on the Indus and the remainder on the Western Nárá.

Administration.—The revenue of Mehar amounted in 1881–82 to £56,693, being £53,376 from imperial and £3317 from local sources. The land-tax furnished £53,376; stamps, £1936; *abkári* or excise, £1335; salt, £567; cesses on land, £3415; and fisheries, £32. The Sub-division is administered by a Deputy Collector. There is a subordinate civil court at Mehar under the District Judge of Shikárpur. The police force consists of 145 men, or 1 policeman to every 981 persons. Every *múkhtiárkár's* head-quarters station has a lock-up, and there is a subordinate jail at Mehar town. In 1881–82 there were 17 Government schools, with 815 pupils. All these schools are vernacular, and for boys only. The Sub-division contains two municipal towns—viz. Mehar and Khairpur Nathesháh. Their receipts in 1881–82 were £214 and £137 respectively.

Climate.—The average annual maximum temperature at Mehar town for the three years ending 1874 was 88·7° F. The total rainfall in 1874 was 3·17 inches. Fevers are prevalent. Mehar town possesses a dispensary.

Mehar.—*Táluk* of the Mehar Sub-division, Shikárpur District, Sind, Bombay Presidency; situated between 27° 2′ and 27° 23′ N. lat., and between 67° 30′ and 68° 14′ E. long. Area, 282·5 square miles. Popu-

lation (1881) 24,577, namely, 12,891 males and 11,686 females, dwelling in 68 towns and villages and 4532 occupied houses. Hindus numbered 2305; Muhammadans, 19,708; Sikhs, 2556; Christians, 4; and Jews, 4. Total revenue (1881-82), £16,453. In 1884 the *táluk* contained 1 civil and 3 criminal courts; police circles (*thánás*), 6; regular police, 37 men. In 1882-83, the area assessed for land revenue was 43,818 acres; and the area actually cultivated, 43,112 acres.

Mehar.—Chief town and municpality of Mehar Sub-division, Shikárpur District, Sind, Bombay Presidency; situated in lat. 27° 10′ 45″ N., and long. 67° 52′ E., on the Kakol Canal, 36 miles south-west of Lárkhána. A picturesque place surrounded with large trees. Head-quarters of the Deputy Collector, and contains the usual Government offices, with a dispensary, market, Government vernacular school, and police lines. Population (1881) 1944; municipal revenue (1882-83), £199; incidence of taxation, 1s. per head. The trade, both local and transit, is in grain, cotton, and tobacco. Post-office, and school with 104 pupils in 1883-84.

Meherpur.—Sub-division and town in Nadiyá District, Bengal.—*See* MIHRPUR.

Mehidpur (*Mehedpur*).—Chief town of the *parganá* of Mehidpur, Indore State, Central India. Situated in lat. 23° 29′ 30″ N., and long. 75° 46′ 30″ E., on the right bank of the Sípra (Seepra), in an angle formed by the confluence of a small feeder, 24 miles from the railway station of Ujjain. Population (1881) 8908. Hindus numbered 6137, and Muhammadans 2771. The town is garrisoned by a company of native infantry, and is a military station of the Bombay army. The opposite bank of the river was the scene of the decisive victory gained in 1817 by the British under Sir Thomas Hislop over the Maráthás under Holkár. Our troops, crossing the river by a ford just above the town, routed the enemy at the point of the bayonet, taking their camp with 63 guns and a large quantity of ammunition. The British loss was 174 killed and 604 wounded; that of the Maráthás was estimated at 3000 men. Post-office.

Mehkar.—*Táluk* of Buldáná District, Berár. Area, 1005 square miles; contains 315 villages, with 20,275 houses. Population (1867) 105,483; (1881) 131,244, namely, 67,170 males and 64,074 females, or 130·6 persons per square mile. Hindus numbered 123,467; Muhammadans, 6442; Jains, 1254; Sikhs, 72; Pársís, 7; and Christians, 2. Area occupied by cultivators, 475,859 acres. Total agricultural population, 96,638. The *táluk* contains 1 civil and 1 criminal court; police circles (*thánás*), 5; regular police, 111 men; village watch (*chaukídárs*), 281. Total revenue, £31,020, of which £26,529 is derived from land. Mehkar contains within its limits the only natural lake in Berár, the salt lake of Lonar.

Mehkar.—Chief town of Mehkar *táluk*, Buldáná District, Berár; situated in lat. 20° 9′ 30″ N., and long. 76° 37′ E., on rising uneven ground on the high road from Jálna Nágpur. Population (1881) 4373. Mehkar is said to take its name from Meghan Kara, a demon, who, after a combat, was put to death by Shárangdhar, an incarnation of Vishnu. Outside the town are the ruins of an ancient edifice of solid masonry attributed to Hemár Panth, and said to be over 2000 years old. In 1769 A.D., the Peshwá Madhu Ráo, accompanied by Sindhia and Rukan-ud-daulá, the Nizám's minister, encamped here, with the intention of punishing the Nágpur Bhonsla, who had assisted Raghunáth Ráo's insurrection. General Doveton also encamped here with his army in 1817 on his march to Nágpur against Apá Sáhib Bhonsla, who had broken the treaty of Deogáon. Mehkar formerly contained many weavers, Hindu and Muhammadan. The latter, about 400 years ago, were so rich that they not only undertook to fortify the place, but could afford to build up the fallen rampart, as appears from an inscription on the Momins' gate still standing. Pindári inroads reduced the town to great distress; and its ruin was completed by the great famine of 1803, after which, it is said, not more than 50 inhabited huts remained. Till quite recently, Mehkar was famous for its excellent *dhotís* (waist-cloths), but the cheapness of European fabrics has lessened the demand for these. Mehkar possesses two Government schools, one of which is for Muhammadans; a dispensary, a post-office, and a public library or reading room. Weekly market.

Mehmadábád.—Sub-division of Kaira District, Bombay Presidency. Bounded on the north by Baroda (the Gáekwár's) territory; on the north-east, east, and south by other Sub-divisions of Káira District; on the west and north-west by Daskroi Sub-division, Ahmadábád District. Area, 174 square miles, with 2 towns, 58 villages, and 22,107 houses. Population (1881) 88,936, namely, males 46,018, and females 42,918. Hindus number 78,617; Muhammadans, 7483; and 'others,' 2836.

The Sub-division consists of a rich level plain, mostly open and thinly wooded. The land is poor, light, and sandy, but a portion is fit for rice cultivation. The rivers Meshvo and Vátrak are shallow streams running south-west.

The Sub-division was settled for 30 years in 1859–63. At the time of survey there were 12,341 holdings, with an average of 7 acres each, paying an average Government assessment of £1, 15s. 2d. In 1876–77, 48,305 acres were under cultivation, of which 2541 were fallow or under grass, and 1876 twice cropped. Mehmadábád Sub-division contained, at the time of Settlement, 86,928 acres of occupied land; 6925 acres of cultivable waste; 3988 acres of barren waste; 6405 acres of roads, rivers, ponds, and village sites, and lands of alienated villages. Grain

crops occupied 41,507 acres; pulses, 3627 acres; oil-seeds, 450 acres; fibres, 631 acres, mostly cotton; and miscellaneous crops, 1425 acres. In 1883 the Sub-division contained 1 civil and 6 criminal courts; police circles (*thánás*), 2; regular police (including Kaira head-quarters' police), 212 men; village watch (*chaukídárs*), 165.

Mehmadábád. — Chief town of the Mehmadábád Sub-division, Kaira District, Bombay Presidency; and a station on the Bombay, Baroda, and Central India Railway; 17 miles south of Ahmadábád. Situated in lat. 22° 49′ 30″ N., and long. 72° 48′ E. Population (1881) 8173, namely, 4153 males and 4020 females, of whom 6535 are Hindus, 1592 Muhammadans, 33 Jains, 9 Christians, and 4 Pársís. Mehmadábád is a municipality, with an income (1882) of £437; incidence of municipal taxation, 6d. per head. It was founded in 1479 by Mahmúd Begára, who ruled in Gujarát from 1459 to 1513. It was improved by Mahmúd III. (1536–54), who built a deer park with an enclosure six miles long. At each corner of the park was a palace with gilded walls and roof. On the right-hand side of the gates leading to the palaces were placed *bázárs*. Of the objects of interest, the most notable are two tombs about a mile to the east of the town, built in 1484 in honour of Mubárak Sayyid, one of the ministers of Mahmúd Begára, and of his wife's brothers. Post-office; dispensary. In 1883–84, the town contained 4 schools with 540 pupils.

Mehsi.—Village in Madhubani Sub-division, Champáran District, Bengal; situated on the main road from Muzaffarpur to Motihári. Population (1881) 3334. Mehsi is supposed to have been the *sadr* or chief station in North Behar, when the Company first acquired the Province. It is noted for a strong-flavoured tobacco, the seed of which is said to have been imported long ago by the European officer formerly stationed here.

Mehwás. — Group of six States under the Khándesh Political Agency, Bombay Presidency; situated in the extreme west of Khándesh, partly among the western extremities of the Sátpurás, and partly on the low ground below the hills, spanning the interval between the Narbadá and Tápti rivers. Population about 7000; estimated gross yearly revenue, £5000. The tract is broken and wild, and more or less covered with forests. Abundantly watered by mountain streams flowing into the Narbadá and Tápti rivers. Inhabited chiefly by Bhíls, who appear to be superior in intelligence and physical development to those of the Dáng tract, and are far more turbulent and warlike. All over the States there is a great deal of rich black soil; but only scattered patches close to the villages are cultivated. As the supply of grain does not meet the local demand, the people eke out a living on fruits, roots, and other forest produce. The Political Agent has not, by efforts long continued, been able entirely to put a stop to the practice of killing

persons supposed to be witches. The six States are Chikhli, Nál-Singpur, Nawalpur, Gawholi, and Kathi. The chiefs of the three last-named are minors, and their States are under Government management. The only trade is in timber.

Mejá.—South-eastern *tahsíl* of Allahábád District, North-Western Provinces, conterminous with Kairágarh *parganá*, and comprising the large estates (*táluks*) of Chaurási, Mánda, Dáiyá, Kohrár, Barskhar, and Kharká. In the north, the country is densely populated and well cultivated, with a fine alluvial soil. The central tract has a band of good level loam, but the east and south consists of low, stony hills, scantily populated, and very little cultivated. Area of the *tahsíl*, according to the latest official statement, 660·8 square miles, of which 638·5 square miles are assessed for Government revenue, the remainder being held rent-free. Of the assessed area, 349·5 square miles are cultivated, 107·4 square miles cultivable, and 181·6 square miles uncultivable waste.

Population of the *tahsíl* (1872) 171,423; (1881) 192,205, namely, males 96,461, and females 95,744; total increase since 1872, 20,782, or 12·1 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 181,839; Muhammadans, 10,166; Jains, 195; 'others,' 5. Number of villages, 581, of which 478 contained less than five hundred inhabitants. The principal proprietary classes are Bráhmans, Rájputs, Kúrmís, and Muhammadans, the cultivating classes consisting of Bráhmans, Rájputs, Ahírs, Kúrmís, Káchhis, Kewats, Káyasths, Muhammadans, and Baniyás. The difference in soil and climate between the northern and southern portions of the *tahsíl* affects not only the number but the condition of the tenantry. In the north, with a good climate and soil, there is a dense population, ample irrigation, high cultivation, and a fairly well-to-do peasantry. In the south, on the other hand, the poorness of the soil necessitates frequent fallows; irrigation is, as a rule, impracticable, except in favoured spots; holdings are large, crops scanty, cultivation slack, and the people badly off. The Government land revenue of the *tahsíl* in 1881 amounted to £29,774, or including local rates and cesses levied on the land, £35,409. Total rental, including cesses, £56,479. In 1884, the *tahsíl* contained 1 civil and 1 criminal court, 5 police circles (*thánás*), a regular police force 58 strong, and a village watch of 410 *chaukídárs*.

Melagiris.—Mountain range in Salem District, Madras Presidency, lying between 12° 10′ and 12° 30′ N. lat., and between 77° 38′ and 78° 2′ E. long., and occupying the south and south-east of Osúr *táluk*. Average elevation, about 3500 feet; highest point, Ponasiheta, 4969 feet. The hills are inhabited by Malayáli hillmen, and are thickly covered with bamboo. There are also some sandal-wood forests. Water is bad

and scarce, and the whole tract is very malarious, fever of a severe type being common.

Meláo.—Town in Baroda State, Gujarát, Bombay Presidency. Lat. 22° 34′ N., long. 72° 52′ E. Population (1881) 5377.

Melapalaiyam. — Town in Tinnevelli *táluk*, Tinnevelli District, Madras Presidency; situated about three miles from Tinnevelli town. Population (1881) 6875, of whom 1860 are Hindus, 4972 Muhammadans, and 43 Christians. Number of houses, 1628. Police station and post-office.

Melapavur. — Town in Tinnevelli District, Madras Presidency. Population (1881) 5262, namely, Hindus, 5033; Christians, 173; and Muhammadans, 56.

Melghát (sometimes called *Gángra*). — *Táluk* and hill tract of Ellichpur District, Berar, lying between 21° 11′ and 21° 46′ N. lat., and between 76° 40′ and 77° 40′ E. long. Bounded on the north by the Central Provinces and the Tápti river; on the east by the Tápti and Nimári; on the south by Ellichpur *táluk;* and on the west by the Central Provinces. Area, 1649 square miles, with 313 villages and 7911 houses. Population (1867) 40,666; (1881) 42,655, namely, 22,217 males and 20,438 females, or 25·86 persons per square mile. Hindus number 41,118; Muhammadans, 1522; Jains, 7; Sikhs, 2; Christians, 5; and Pársís, 1. Area occupied by cultivators, 69,742 acres. Total agricultural population, 30,108. Melghát is a section of the Sátpura range, extremely rugged, and broken into a succession of hills and valleys. The main ridge or watershed of the range, rising to 3987 feet above sea-level at Bairát, runs from east to west, almost parallel to, and a few miles from, the plain of Berar on the south. This ridge terminates towards the south very abruptly, in some cases in sheer scarps of trap rock, over 1000 feet high, forming round the station of Chikalda magnificent cliffs, which characterize its scenery. The northern ranges, on the other hand, gradually descend by gently sloping plateaux to the valley of the Tápti. In the Melghát, the crest of the Sátpuras attains an average elevation of 3400 feet above sea-level, while the highest of the lower hills bordering on the Tápti is 1650 feet.

The chief passes are Mallána on the east, Dúlghát on the west, and Bingára on the extreme west. The two first have roads practicable for wheeled carriages. From time immemorial, forests have covered the highlands, clearings for cultivation existing here and there. Teak and *tiwas* (Ougeinia dalbergioides, *Benth.*) abound in parts, together with many other valuable timber-trees. The trunks of some of these—notably the *sáj* (Terminalia tomentosa, *W. and A.*), *hardu* (Adina cordifolia, *Hook. f. and Bth.*), *lendia* (Lagerstrœmia parviflora, *Hook.*), and *behera* (Terminalia belerica, *Roxb.*)—run up to a height of 60 or

70 feet without a branch. The bamboo is abundant. The forests are now under Government conservancy. Various dyes, gums, fibres, beeswax, and honey are among the forest produce. Large deer and smaller game abound in the forests, and tigers are also found.

Numerous streams rise in the Sátpuras. Seven of the most important flow south into the Púrna affluent of the Tápti, while some drain the country northwards, carrying their waters direct to the Tápti, which skirts in its course about 30 miles of the northern boundary of Melghát. Towards the hot season, all these streams dry up, save where, in the upper hills, deep cavernous basins are found, large enough to hold a supply till the next monsoon. Lower down, the water lies in large sheets, one of which, at a village on the Sipna, is above a mile long, and about 100 yards wide, and of considerable depth. The climate of the higher ranges is healthy and invigorating; the lower valleys are malarious and enervating, except during the hot season. The mean temperature at Chikalda is 71° F. The tea-plant thrives in Melghát; and as the rains approach, orchids and polypods spring into life. Among the few gay flowers in the cold months are those of the downy Grislea, and the sweet Clematis gouriama, whose odour hangs on every hill, where its plant is seen entwining its leafy tendrils from branch to branch, in snowy wreaths.

The Melghát contains no town; but in this tract are situated the remarkable forts of GAWILGARH and NARNALA, and the pleasant hill station of CHIKALDA, 3777 feet above sea-level. Dárni, the largest of the villages, contains fewer than 800 inhabitants; the only others worthy of note are Dewa and Bairágarh, where annual fairs are held. Large numbers of horned cattle are kept, and the trade in *ghí* is considerable. In 1883, the *táluk* of Melghát contained 1 civil and 1 criminal court; police circles (*thánás*), 6; regular police, 81 men; village watch, 4. Total revenue, £5660, of which £3496 was derived from land.

More than four-fifths of the population are aborigines and hill tribes, of whom the Korkus are the most numerous. The report of the Census of 1881 returned the Korkus as numbering in Berar 28,450, namely, 14,443 males and 14,007 females. Of these, 26,781 were found in Melghát *táluk*. The Korkus belong to the Kolarian stock, who are believed to have entered India on the north-east, making their way along the outskirts of the Himálayas. In language and general type, they are said to be almost identical with the KOLS and SANTALS. The Korkus are slightly taller than the Gonds, well-built and muscular, but with unpleasing features. They worship, in addition to Mahádeo and other Hindu gods, their male and female ancestors; they hold a ceremony called *phuljagni*, at which they place the departed spirits at rest. The village priest is expected to ward off and cure

diseases, and to defend them from wild beasts. The belief in magic and supernatural powers is universal. Whenever a Korku dies, a slab of sacred teak-wood is set up in the village cemetery. Of the 28,450 Korkus, the Census returned 28,400 as professing Hinduism.

The Korkus who first came to Berar found the Nihals in possession of Melghát. Gradually the Nihals lost their power, and became the village drudges of the Korkus. The Nihals are now fast losing their language also; the younger generation speak only Korku. The two tribes are friendly; they smoke together, but the Nihals generally sit apart, yielding the higher or better position to the Korkus. The Nihals were once much addicted to cattle-lifting, but they have held this propensity in check of late years. About one-third in each sex are unemployed; the remainder are chiefly agriculturists. The Nihals of Berar are found almost exclusively in Melghát. The Census of 1881 returned them as numbering 2483, all professing Hinduism.

Melukote (*Melkot*, literally '*Superior Fort*').—Sacred village and municipality in Attikuppa *táluk*, Hassan District, Mysore State. Lat. 12° 40′ N., long. 76° 43′ E. Population (1881) 2267, of whom the majority are Sri-Vaishnav Bráhmans. Municipal revenue (1881–82), £100; incidence of taxation, 10½d. per head. Formerly a great city, of which only the ruins now remain. In the 12th century, the Vishnuite reformer, Rámánujá, lived here for fourteen years, having fled from the persecution of the Cholá king. It thus became the chief seat of the Sri-Vaishnav Bráhmans, who converted to their sect the Ballála dynasty, and obtained rich endowments. In 1771 the town was sacked by the Maráthás. The principal temple, dedicated to Krishna under the name of Cheluva-pulle Ráya, was under the special patronage of the late Mahárájá of Mysore, and possesses a valuable collection of jewels. A more striking building is the temple of Narasimha, situated on a rocky eminence. The *Vaira Mudi* festival is annually attended by 10,000 persons. The *guru* or priest of the Sri-Vaishnav Bráhmans has his residence here; and about 400 priests are attached to the great temple, of whom some are men of learning. There are special industries of cotton-weaving, and the manufacture of ornamental fans out of the fragrant roots of *khas-khas* grass. A white clay called *náma*, found in the neighbourhood, which has been formed by the decomposition of schistose mica, is used by the Sri-Vaishnavs for painting the sectarian mark on their foreheads, and is exported for this purpose as far as Benares.

Melúr.—*Táluk* or Sub-division of Madura District, Madras Presidency. Area, 628 square miles. Population (1881) 132,537, namely, 63,169 males and 69,368 females, dwelling in 93 villages, containing 29,354 houses. Hindus number 124,322; Muhammadans, 7506; and Christians, 709. In 1883, the *táluk* contained 2 criminal courts;

police circles (*thánás*), 7; regular police, 57 men. Land revenue, £18,113.

Melúr.—Village in Bangalore District, Mysore State. Population (1881) 629. A large cattle fair is held annually for fourteen days from the full-moon in the month of Chaitra (March—April), in connection with the Gangadevi *parishe*, which is attended by 10,000 persons.

Memadpur. — Native State within the British Agency of Mahi Kántha, Gujarát (Guzerát), Bombay Presidency. Population (1881) 644. Tribute of £18 is paid to the Gáekwár of Baroda. Gross annual revenue, £160.

Memári.—Town in Bardwán District, Bengal; station on the East Indian Railway. Manufacture of silk *sárís* and *dhutís*.

Mendarda.—Town in Káthiáwár, Bombay Presidency.—*See* MANDURDA.

Mendháwal.—Town in Khalílábád *tahsíl*, Basti District, North-Western Provinces; situated in lat. 26° 58′ 45″ N., and long. 83° 9′ 10″ E., 5 miles from the right bank of the river Rápti, and 2 from the north shore of the Bakhira Tál, 20 miles north-west of Gorakhpur cantonment, and 29 miles north-east of Basti town. Population (1872) 8124; (1881) 11,592, namely, Hindus, 9372, and Muhammadans, 2220. Area of town site, 207 acres. The town consists chiefly of mud huts irregularly grouped about a winding road, which is crossed at intervals by minor lanes. The square or principal market-place is in the centre of the town at the junction of the chief thoroughfares, and is lined with fairly well-built shops. Mendháwal is the largest and commercially the most important town in Basti District. Its trade consists chiefly in the exchange of goods from the Nepál hills for goods in the Ganges plain. The weekly market days are supplemented by three annual religious fairs. The people are well dressed and prosperous in appearance. The town contains a post-office, dispensary, school, and *sarái* or native inn.

Mendi-khálí.—A navigable arm of the MEGHNA river, Bengal; communicating with the BRAHMAPUTRA at Kákiár Tek in Dacca District.

Meng-bra.—Township in Akyab District, Arakan Division, British Burma.—*See* MINBRA.

Meng-dún.—Township and town in Thayet-myo District, Irawadi Division, British Burma.—*See* MINDUN.

Meng-gyí. — Township and town in Tharawadi District, Pegu Division, British Burma.—*See* MIN-GYI.

Meng-hla.—Township in Tharawadi District, Pegu Division, British Burma.—*See* MIN-HLA.

Mengni.—Petty State in the Halár division of Káthiáwár, Bombay Presidency; consisting of 8 villages. Area, 34 square miles. Popula-

tion of Mengni village (1881) 1329; of the petty State, 3454. Situated 15 miles south of Rájkot; soil fertile, and water near the surface. Estimated revenue in 1881, £2000; tribute of £341, 4s. is paid to the British Government.

Mer and Ser.—Mountain peaks of the Himálayan system, 50 or 60 miles east of the Kashmír (Cashmere) frontier, Northern India. Probable situation, lat. 34° N., long. 76° 10′ E. Thornton states that these two mountains rise to a great height above the surrounding peaks, and exactly resemble one another in their regular conical form, though one is completely white and the other uniformly black—a peculiarity of which no explanation has been given, as both appear to rise above the level of perpetual snow. Hügel saw them from Wazírábád, in the Gujránwála plain, 140 miles distant, overtopping all the hills of Kashmír and many other intervening heights.

Meratúr (*Mirritúr*).—Town in Tanjore *táluk*, Tanjore District, Madras Presidency; situated about 10 miles north-east of Tanjore town, in lat. 10° 50′ N., long. 79° 23′ E. Population (1881) 7494, of whom 7067 are Hindus, 17 Muhammadans, and 410 Christians. Number of houses, 1477.

Mercara.—*Táluk* and town in Coorg.—*See* MERKARA.

Mergui.—District in Tenasserim Division, occupying the southernmost portion of British Burma; lying between 9° 58′ and 13° 24′ N. lat., and between 90° 15′ and 98° 35′ E. long. Area (including Tavoy Island, added in 1875), 7810 square miles. Population in 1872, 47,192 persons; in 1881, 56,559. Bounded on the north by Tavoy District; east by the Yoma Mountains, the Pak-chan river, and Siam; south by Lower Siam; and west by the Bay of Bengal. Its length is 206 miles, and its mean breadth (excluding Mergui Archipelago) 40 miles. The head-quarters of the District are at MERGUI TOWN.

Physical Aspects.—Two principal ranges cross the District from north to south in a nearly north-west and south-east direction, running almost parallel to each other for a considerable distance, with the river Tenasserim winding between them, till it turns south and flows through a narrow rocky gorge in the westernmost range to the sea. Amidst these mountain ranges and their subsidiary spurs are several plains, the largest and most productive of which lies on the western side of the District, stretching from lat. 11° 28′ to 12° 58′ N. That enclosed between the two main ranges (100 miles in length and 10 in breadth) possesses a rich alluvial soil, but at present is almost entirely covered with forest, except in the patches cleared by the Karens and Siamese. In the south is the valley of the Pak-chan; and extending for 30 miles along the right bank of that river is a third plain, of which the soil is suitable for the cultivation of all kinds of tropical produce. The entire face of the country is densely clothed with vegetation.

Indeed, the whole District, from the water's edge to the loftiest mountain ridge may be regarded as an unbroken forest, only 83 square miles being under cultivation. The timber-trees found towards the interior, and on the more elevated situations, are of great size and beauty; the most valuable being teak, *thin-gan* (Hopea odorata, *Roxb.*), *ka-gnyin* (Dipterocarpus alatus, *Roxb.*), etc. The coast-line, studded with islands, of which within the District limits there are 207, is much broken, and for several miles inland very little raised above sea-level, and drained by numerous muddy tidal creeks. Southwards of Mergui, it consists chiefly of low mangrove swamps alternating with small fertile rice plains. After passing the mangrove limits, the ground to the east gradually rises till it becomes mountainous, even to the banks of the rivers, and finally culminates in the grand natural barrier dividing Burma from Siam.

The four principal rivers in the District are the TENASSERIM, the PAK-CHAN, the Le-gnya, and the Pa-lauk, all navigable for some distance of their course, excepting the last. The first has its sources north of Mergui, which it traverses from north to south in a narrow valley as far as the town of Tenasserim, where it is joined by a tributary, the Little Tenasserim; the united stream then turns suddenly westwards, and empties itself into the Bay of Bengal. The Le-gnya rises in the main range in about lat. 13° 45′ N., and has a general northerly course for some 60 miles past Le-gnya town, when it turns west, and falls into the Bay of Bengal. The Pak-chan also rises in the main range, and flows in a southerly direction for 78 miles to Victoria Point; the breadth at its mouth is 2½ miles. The Pa-lauk is a small stream in the north, which is only 700 yards broad at its mouth; its course is obstructed by rapids and falls.

There are several mountain passes in the District. The most northern, across the main range into Siam, is by the Saw-yaw, but this is only used by Karens. Seventy-six miles farther south is another pass, at the source of the Thien-khwon stream, called by the Burmese *Maw-daung* ('Tired Hill'), and by the Siamese *Khow-maun* ('Pillow Mountain'). This forms the chief line of communication between Mergui and the southern Provinces of Siam. The other four principal passes have the Nga-wún for a common base, the mountains being crossed by following up its eastern affluents. Coal is found in the District; but the most serious objection to its profitable working is the rapid dip of the beds, and the consequent depth to which all shafts would have to be sunk. The principal localities are situated on the banks of the Tenasserim and its tributaries. Gold, copper, iron, and manganese are also found in various parts of the District. In the Pa-lauk valley are several thermal springs, in the hottest of which the thermometer registers 196° F. Tigers, leopards, rhinoceros, and elephants abound, as well as several

kinds of deer and wild hog. The animal and vegetable products are again referred to in the section on the trade of the District.

History, etc.—Of the early history of Mergui but little is known. Ralph Fitch and Cæsar Frederic (1569 A.D.) both mention it as an important trading country, and in the 17th century it probably formed a portion of the Siamese dominions. Tenasserim town is said to have been founded in 1373 A.D. by the Siamese, from whom it was wrested at the end of the 18th century by Alaung-payá. It remained in the possession of the Burmese up to the time of the first Anglo-Burmese war; but during this interval the country was in a chronic state of anarchy. In 1824, Sir Archibald Campbell despatched a force which, after capturing Tavoy, appeared before Mergui on the 6th of October of that year. The town speedily yielded, and the stockade was carried by assault. Early in 1825, a Siamese force ravaged the country about Tenasserim, but was soon routed; and from that period Mergui has remained in undisturbed possession of the English.

The only architectural remains in the District of any historical interest are the ruins of the walls of old Tenasserim, in which place there is a pagoda called Wot-tshin, built in 1350, but of no great sanctity. The Ze-da-wún pagoda, on a hill on the banks of the Tenasserim river, is alleged to have been founded by King Na-ra-pa-dí-sí-thú in 1208, and is annually visited by large numbers of pilgrims.

Population, etc.—From the notices of early travellers, it appears that Mergui, when under Siamese rule, was a rich and densely populated country. On the occupation of the District by the British, it was found to be almost depopulated—the result of the border warfare already mentioned, and of the cruelties exercised by the Burmese conquerors. The number of inhabitants at that time was only 10,000. In 1872, it had risen to 47,192; in 1876–77, to 51,846; and in 1881, to 56,559. Males in 1881 numbered 29,319; females, 27,240. Number of towns, 1; villages, 199; occupied houses, 10,159; unoccupied, 340. The density of population was only 7·24 persons per square mile; villages per square mile, ·025; houses per square mile, 1·34; persons per occupied house, 5·57. Classified according to age, there were under 15 years—11,850 males and 11,075 females; total, 22,925, or 40·5 per cent.; 15 years and upwards, there were, 17,469 males and 16,165 females: total adults, 33,634, or 59·5 per cent. Classified according to religion, there were—Hindus, 273; Muhammadans, 4130; Buddhists (including Karens), 47,523; Christians, 1795; and Nat-worshippers, or persons of non-Buddhist indigenous religion, 2838. Christians are further divided into 10 European British subjects, 39 Eurasians, and 1746 native converts. Of the last, 1625 are Baptists. The Muhammadans are thus sub-divided—Shiás, 52; Sunnís, 3870;

Farazis, 156; 'others,' 52. According to language, there were in 1881—37,457 persons speaking Burmese (including Arakanese); 9210 speaking Karen; 5936 speaking Shan; 14 speaking Taungthoo; 954 speaking Chinese; 1459 speaking Malay; 894 speaking Salone or Selung; 351 speaking Hindustaní; 33 speaking Bengalí; and a very few speaking French and Portuguese. The excess of males over females may be ascribed to the immigration of males from Siam, China, India, and the Straits, who rarely bring their wives or families with them.

The chief aboriginal tribe of this District, the Selungs, are very low in the scale of civilisation, but are gradually becoming more settled in their habits. Their chief occupations are fishing, collecting sandal-wood and sea-slugs. The total number of agriculturists in Mergui (1881) was 20,285; of non-agriculturists, 36,274. The population is distributed by the Census of 1881 into the following six main groups:—(1) Professional class, including State officials of every kind and the learned professions—males 719, and females 65; (2) domestic servants, inn and lodging keepers—males 114, and females 137; (3) commercial class, including bankers, merchants, carriers, etc.—males 1045, and females 845; (4) agricultural and pastoral class, including shepherds—males 12,166, and females 8261; (5) industrial class, including all manufacturers and artisans—males 1817, and females 3942; and (6) indefinite and non-productive class, comprising children, general labourers, and persons of unspecified occupation—males 13,458, and females 13,990. The Census of 1881 returned the boat population of British Burma; people who in the dry season travel about the numerous creeks and rivers, live in their boats, and are engaged in trades of various kinds. In Mergui District the boat population numbered 1428, or 2·5 per cent. of the whole population, namely, 919 males and 504 females, living in 282 boats. The District contains only one town with more than 5000 inhabitants. The head-quarters station, MERGUI, has a population of 8633; Pa-law, 973; TENASSERIM, 577. The remaining villages, 197 in number, are small, and of no importance; 106 contain less than 200 inhabitants, 78 between 200 and 500, and 13 between 500 and 1000.

Agriculture.—The District is far more important from its mineral than from its agricultural wealth, only 83 square miles of the total area of 7810 being under tillage. In 1882–83 there were 2992 miles returned as cultivable waste. Rice is grown in the plains and in the hill *taungyas*, and small quantities are exported from the coast towns. The area thus cultivated is slowly but steadily increasing. Sugar-cane, tobacco, and sesamum are also produced to some extent; the *dhaní* (Nipa fruticans, *Wurmb.*) is found in great perfection here, and from it a coarse kind of sugar is extracted. It is in fruits and vegetables, however, that Mergui is agriculturally richest. Dorians, mangosteens, jack, cocoa-nuts, guavas,

mulberries, oranges, pine-apples, yams, gourds, cucumbers, etc., are grown extensively; and the frequent steam communication with Rangoon and Maulmain facilitates their export. The area under the chief crops in 1881–82 was—rice, 36,875 acres; *dhaní* palms, 4312; cocoa-nuts, 137; areca-nuts, 40; plantains, 628; the area planted with mixed fruit-trees was 4012 acres. The soil is poorer than in any other part of the Province, the average out-turn of rice being only 1072 lbs. per acre. The price per *maund* of 80 lbs. of rice was 5s. 1½d.; of sugar, £1, 13s. 3d.; of tobacco, £4. The daily wage of a skilled labourer in 1881–82 was 2s.; of an unskilled workman, 1s. The average holding of each cultivator is about 5·70 acres.

Manufactures, etc.—The principal manufactures in the District are sugar-boiling and tin-smelting. Sugar is made chiefly in Tenasserim, Le-gnya, and the villages round Mergui Island. Jaggery or crude sugar is obtained from the Nipa palm. The cost of smelting tin is estimated at 3s. per 100 lbs. of ore, which yield on an average 66 lbs. of pure metal. In 1881–82 only 20 out of the 29 mines in Mergui were worked, in the usual desultory manner, chiefly by the Chinese. It was proposed in 1883–84 to make a thorough inquiry into the tin-mining industry, with a view to its establishment on a more satisfactory footing. A lease of lead-mining was granted to Mr. Law of Maulmain. As yet (1883–84) the success of the enterprise is not assured. The early importance of the commerce of Mergui has been already alluded to. The District has a flourishing trade with Rangoon, Bassein, and the Straits Settlements. The agricultural stock in 1883–84 were—horned cattle, 34,080; horses, 3; sheep and goats, 513; pigs, 2060; elephants, 23; carts, 82; ploughs, 2384; and boats, 3065. The chief articles of export are rice, rattans, torches, dried fish, areca-nuts, sesamum seeds, molasses, sea-slugs, edible birds' nests, and tin. Sea-slugs, shark-fins, and edible birds' nests are sent mainly to Singapore and Penang; and rice is sometimes carried to the Nicobar Islands, whence are brought in exchange tortoiseshell, and occasionally wreckage. The staple imports are piece-goods, tobacco, cotton, earthenware, tea, and sugar. Value of exports (1876–77), £44,307; of imports, £49,057. The average annual value of exports for the five years ending 1882–83 was £54,081; and of imports, £44,215. In 1882–83 the figures were, exports, £49,458; imports, £45,996. Postal communication is carried on by the steamers of the British India Steam Navigation Company, which call once a week on their passage between Calcutta and the ports of British Burma; also by the Maulmain Steam-tug Company, whose steamers run from Mergui to Maulmain once a month. Total length of water communication, 178 miles; of roads, 79 miles.

Revenue, etc.—During the 16th century, the Peguan sovereigns received from Mergui an annual revenue of £39,000, 30 elephants, and

all the custom dues of the port; but when this District was first occupied by the British, the revenue derived was very small, and in 1853–54, twenty-seven years later, amounted to only £5650. In 1866–67, the revenue had risen to £13.517; in 1876–77, to £18,208; and in 1881–82, to £21,577. Customs offices were established in 1855–56; and in 1861–62, the turtle banks were first leased out for a term of years. During the last twenty-six years the revenues have nearly quadrupled, while the land revenue and capitation tax have increased by 342 and 328 per cent. respectively. In addition to this imperial revenue, a local one is raised, which in 1881–82 amounted to £997. Mergui is administered by a Deputy Commissioner, 5 extra-Assistant Commissioners, and a Superintendent of Police. The District is divided into the 5 townships of MERGUI, PA-LAW, TENASSERIM, LE-GNYA, and MA-LI-WON. The number of criminal, civil, and revenue courts is 6, and their average distance from a village 32 miles. The police force consists of 21 officers and 199 men, of whom 5 are boatmen and 14 are paid from municipal funds. The largest number of prisoners confined in the District jail at Mergui town, during the five years ending 1881, was 25; all long-term convicts are sent to Maulmain. The hospital and charitable dispensary are also in the head-quarters station; number of patients treated (1881), 4900. Until late years, the education of the District was carried on chiefly by the Buddhist priests and by the Roman Catholic and American Baptist missionaries; but in 1871 the State opened a school at Mergui. In 1881–82, the number of pupils on the rolls (all learning through the English language) was 22; the average daily attendance, 13. Besides this, there are in the District 21 other schools aided by Government and inspected by the State officers, but the standard attained in them is not high. The Census Report of 1881 returned 2324 boys and 634 girls as under instruction; besides 8387 males and 433 females able to read and write, but not under instruction.

Medical Aspects.—The climate of Mergui is remarkably healthy, as the great heat arising from its tropical situation is moderated by land and sea breezes. The variation of temperature is small. The most obvious peculiarity of the atmosphere is its humidity; the rainfall in 1881 amounted to 181·67 inches. The prevalent diseases are remittent and simple fevers, bronchitis, rheumatism, and small-pox. Reported number of deaths per 1000 of population for the five years ending 1881, 17·01. [For further information regarding Mergui, see *The British Burma Gazetteer*, compiled by authority (Rangoon Government Press, 1879), vol. ii. pp. 383–415. Also the *British Burma Census Report* for 1881; and the several Administration and Departmental Reports from 1880 to 1884.]

Mergui.—Chief town of Mergui District, Tenasserim Division, British Burma; situated in lat. 12° 11′ N., and long. 98° 38′ E., on

an island in the principal mouth of the Tenasserim river, which falls into the Bay of Bengal about two miles to the north of the town. The harbour admits vessels drawing 18 feet of water. Rising almost from high-water mark is a low range of hills, on which stand the court-houses and the old barracks. The town lies to the north, east, and west. The other buildings are the treasury and police office, in the same masonry building as that in which the courts are held, the circuit-house on the northern crest of the hill, and the charitable dispensary somewhat lower down; on the beach is the market with a masonry causeway to the sea, covered at high tides. The population in 1881 was 8633, consisting of many races—Talaings, Burmese, Malays, Bengális, Madrasis, Siamese, and Chinese. Mergui was formerly a penal station for Bengal. The present town is modern, having replaced a flourishing city mentioned by more than one of the early travellers, and of which, in the middle of last century, only a few fishing hamlets marked the site. The place was taken during the first Anglo-Burmese war by Colonel Miles, and has since remained British. A considerable trade is carried on with the other ports of British Burma and with the Straits Settlements. Chief exports—rice, timber, dried fish, etc.; imports—cotton piece-goods, silk, and tea. Value of imports (1882–83), £49,458; exports, £45,996: total, £95,454.

Mergui Archipelago.—A large group of islands, which, commencing in the north with Tavoy Island, in about 13° 13′ N. lat., stretches southwards beyond the limits of British territory in Burma. They have been described as 'a cluster of islands and islets with bays and coves, headlands and highlands, capes and promontories, high bluffs and low shores, rocks and sands, fountains, streams and cascades, mountain, plain, and precipice, unsurpassed for their wild fantastic and picturesque beauty.' The most westerly are composed of granite and porphyry; those nearer the shore, of sandstone and conglomerate. Some of these islands are 3000 feet in height. Maingay Island, in lat. 12° 32′ N., and long. 98° 7′ E., can be seen for 11 miles, and the southern peak of St. Matthew's, in lat. 10° 52′ N., and long. 98° E., for 13 miles. They are but sparsely inhabited, and are the resort of a peculiar race, the Selungs, who rarely leave them to visit the mainland. The principal products are edible birds' nests and *bêche de mer* (Holothuria; Sp. tripang, or sea-slug), collected by the Selungs, who exchange them with Burmese and Malays for rice and spirits. The caoutchouc tree is said to grow in great abundance, and the gum is extracted by Malays from Singapur. The islands are infested by snakes and wild animals—tiger, rhinoceros, and deer.

Meriah.—Term applied to the victim in Kandh human sacrifices.—*See* KANDHS.

Merkára (*Mercara*).—*Táluk* or Sub-division of Coorg, Southern

India, with administrative head-quarters at MERKARA town. Area, 216 square miles; number of villages, 61; number of houses, 3141. Population (1871) 32,123; (1881) 25,703, namely, 15,473 males and 10,230 females, of whom 20,944 are Hindus, 1465 Muhammadans, 14 Jains, 435 Christians; there are 2847 native Coorgs. Merkára *táluk* occupies a table-land in the centre of Coorg, about 3500 feet above sea-level. The country is much broken by hill ranges and ravines. The chief passes are those leading east to Fraserpet and Siddapur, and west to Sampaji. The area is divided into 5 *náds* or hill tracts. The jungles yield valuable timber, including teak, sandal-wood, and bamboo. The American aloe (Agave americana, *Linn.*) is found, but its fibre is not utilized. The cultivation of cinchona (Cinchona succirubra, *Pavon.*), for the preparation of quinine, has been successfully carried on since 1863.

Thirty-four square miles of forest have been reserved in the east of the *táluk*. This region is known as the Dubbare. The Merkára plateau was supposed to be well adapted to the cultivation of coffee, which was first attempted by Mr. Fowler in 1854; but though the soil is favourable, high wind and irregularity of rainfall, frequently drought during the blossoming time, and excess of rain during the monsoon, have depressed the industry. Some of the coffee estates on the slopes of the Sampaji valley have proved especially unsuccessful. The coffee estates round Haleri and Tuntikopa are still prosperous. The plants are grown on the slope of the hills, where they do not require to be protected by artificial shade. The chief trouble of the planter is to prevent the light surface soil from being washed away by the excessive rainfall. This object is attained by cutting terraces and drains, or by a judicious system of weeding.

Merkára (*Madhukeri*, or *Mahádeva-pet*).—Chief town and administrative capital of the territory of Coorg, Southern India. Situated in lat. 12° 26′ 50″ N., and long. 75° 46′ 55″ E., on a table-land 3809 feet above the sea, 155 miles south-west from Bangalore, 72 miles north-east from Cannanore, and 86 miles east from Mangalore, by the great trunk roads. Population (1881) within municipal limits, 6227, and in cantonment, 2156; total, 8383, namely, 4800 males and 3583 females, occupying 1676 houses. Hindus numbered 5760; Muhammadans, 1886; Christians, 713; and 'others,' 24. Municipal revenue (1881), £793; rate of taxation, 1s. 0¾d. per head. Merkára is said to have been founded in 1681 by Madhu Rájá, the first of the Coorg Rájás whose history is given in the *Rájendra-náme* or Royal Chronicle. The original seat of the family had been at HALERI; but henceforth Merkára has continued to be the capital of the State up to the present day.

The fort is situated on an eminence commanded by neighbouring

hills. The walls of stone, still in fair preservation, were built by Tipú Sultán during the brief period of Muhammadan domination in Coorg. The shape is an irregular hexagon, with a ditch all round, and a glacis on the north. Within are the palace, the English church, and the arsenal. The offices of the administration and residence of the Commissioner are situated within the eastern gateway. The palace was erected in 1812 by Linga Rájendra Wodeyar, and has recently been put into thorough repair. It covers an area of 200 square feet, with an open court in the centre. The ground plan is that of a Coorg house, two stories high, with a superstructure in European style. The whole is handsomely built of brick and mortar, and is used mostly as public offices.

From the centre of the town there is a fine view of the western range of Gháts, known as the Nalknád, and bounded by the Brahmagiris, the southern limit of Coorg. The mountain peaks of Kotebetta and Pushpagiri are visible on the north. The principal buildings in the native quarter of the town are the mausoleums of Dodda Virá Rájendra, the hero of Coorg independence, Linga Rájendra, and their favourite queens. These are all enclosed within a high embankment; they are built in a Muhammadan style of architecture, with a central dome and minarets at the corners. The tombstones are covered with a white cloth, and flowers renewed daily. A lamp is kept continually burning, and the Lingáyat attendants are endowed by Government with an annual grant of £200. The chief Hindu temple is that called the Omkareswara Devastána, built in the same style as the mausoleums. The Bráhman priests of this temple receive an endowment of £485 a year.

The central school occupies the site of a handsome building, erected by Dodda Virá Rájendra as a reception-house for English visitors. In 1883–84 this school was attended by 306 pupils, of whom 237 were native Coorgs. The boarding-house in connection with it had 92 inmates. In addition, there were a normal, a Kanarese, and a Hindustaní school. In 1882–83, the number of in-door patients relieved at the dispensary was 278, and of out-door patients, 5500. The Basel Mission has a station here with 2 missionaries. A girls' school is attached to the mission. As compared with the plains of India, the climate of Merkára is cold and damp. The average annual temperature is in May 72° F., and in September, 64°. The average annual rainfall for five years ending 1882–83 was 139·8 inches, of which 103·75 inches fell in the monsoon months between June and September. The climate is not unfavourable to European health, but natives who have recently arrived from the low country suffer much from fever and bowel complaints.

The principal events in the history of Merkára may be thus sum-

marized—the driving out of Haidar's Muhammadan garrison in 1782, the capitulation of Tipú Sultán's general to Dodda Virá Rájendra in 1790; and the unopposed occupation by the British in 1834, when the Rájá was deposed and the territory of Coorg annexed to British India.

Merkára has ceased to be a military station. A weekly fair is held on Fridays, and a fair for coolies on Sunday. A tile manufactory turns out tiles and pipes similar to those made at Mangalore.

Merta (*Mirta*). — Town in Jodhpur (Marwár) State, Rájputána; situated in lat. 26° 39′ N., and long. 74° 5′ 35″ E., on the route from Jodhpur city to Ajmere, 76 miles north-east of the former. Population not returned separately in the Census Report for 1881. The town stands on high ground, and has a striking appearance. It is surrounded by a wall, the eastern side of which is of good masonry, while on the western side it is of mud. Numerous temples and a large mosque. Water abundant, but brackish. The plain of Merta was the scene of the great battle of 1754, in which Vijáya Singh of Jodhpur was defeated by the Maráthás under Sindhia; this led to the acquisition of Ajmere by the Maráthás, under the Frenchman de Boigne, and their permanent hold on Rájput territory. The country round has many stone pillars erected to the memory of former battles.

Mertigudda (or *Kalasa*).—Mountain in Chikmagalúr *táluk*, Kádúr District, Mysore State, 5451 feet above sea-level. Lat. 13° 18′ N., long. 75° 26′ E. The sides are clothed with forest trees, among which the *champak* (Michelia Champaca, *Linn.*) is conspicuous, and broken by occasional terraces of rice cultivation, and numerous gardens of areca-nut. The ascent is very steep. The view from the summit is described as magnificent.

Merwára. — Hill Sub-division in the isolated British District of Ajmere-Merwára, Rájputána, lying between 25° 24′ and 26° 12′ N. lat., and between 73° 48′ and 74° 31′ E. long. Area, 640·8 square miles. Population (1872) 69,234; (1876) 86,417; and (1881) 101,434. Bounded north by Jodhpur (Márwár) and Ajmere; east by Udaipur (Mewár) and Ajmere; south by Udaipur; west by Jodhpur. The Sub-division comprises a narrow strip of territory, 70 miles in length, but varying in breadth from 1 to 15 miles. Scenery hilly and greatly varied; the highest peaks attain an elevation of 2855 feet above the sea; average level of valleys, 1800 feet. Naturally dry and unproductive, but rendered comparatively fertile by numerous tanks (formed by embanking gorges or torrents), most of which have been constructed since the introduction of British rule.

The Sub-division of Merwára is divided into British Merwára, area, 302·3 square miles; population (1876) 48,363; (1881) 57,309:

Mewár-Merwára, area, 266·3 square miles; population (1876) 33,049; (1881) 38,514: and Márwár-Merwára, area, 72·2 square miles; population (1876) 5005; (1881) 5611. The whole territory, comprising an area of 640·8 square miles, and a population of 101,434 souls, is under British administration; the surplus revenues of the Mewár tract being paid to the Mahárána of Udaipur, and those of the Márwár tract to the Mahárájá of Jodhpur.

The present inhabitants of Merwára are promiscuously designated Mers, or hillmen, a name derived from 'Mer,' which signifies a hill. The two main tribes or clans are the Chíta and Barar. According to the Census of 17th February 1881, the total population (101,434) was distributed into 56,175 males and 45,259 females, dwelling in one town and 329 villages, and inhabiting 13,577 houses. Average density of population, 158 persons per square mile. Roughly, every two square miles of area has its village; number of houses per square mile, 25; persons per house, 7·4. In point of religion, Hindus numbered 81,973, or 80·8 per cent.; Muhammadans, 12,624, or 12·4 per cent.; Jains, 6502; Christians, 328; and Pársís, 7. Of the Hindus, 1869 were Bráhmans, 1181 Rájputs, and 18,395 castes of good social position, such as Agarwála, Oswál, Khattrís, Gujars, Játs, Mállís, and other respectable artisan or guild castes. Inferior castes, mostly the lower class of artisans, numbered 6250; impure castes (Chamárs, Kolís, Aherís), 15,994; aboriginal tribes (Mers, Meráts, Mínas, Rawats, Bhíls), 44,786. The Muhammadans, divided into tribes, were thus distributed:—Shaikhs, 2417; Sayyids, 174; Mughals, 104; Patháns, 741; Musalmán Meráts, 8339; and others (*fákír* and mendicant tribes), 849. Of the Christians, 317 were Presbyterians, all the native converts (313) being of this sect. Only 1388 males and 66 females were returned in 1881 as under instruction, besides 4660 males and 137 females not under instruction, but able to read and write.

Of the 330 towns and villages of Merwára returned in the Census, 14 are now deserted. Of the remainder, 201 contain less than two hundred inhabitants; 77 between two and five hundred; 22 between five hundred and one thousand; 12 between one and two thousand; 3 between two and three thousand; and 1 between fifteen and twenty thousand. BEAWAR, the head-quarters town, is a municipality, and contained a population of 15,829 in 1881.

Merwára was originally inhabited by a predatory race of half-naked aborigines, careless of agriculture, and engaged in constant plundering expeditions into the surrounding States. Up to 1818 its history is a blank. In March 1819, after the British occupation of Ajmere, a force from Nasírábád (Nusseerábád) was despatched to subdue these wild hillmen, who, in spite of treaty engagements, had made several raids into our territory. Their villages were taken, but the inhabitants escaped into

the impenetrable jungle which then clothed the country. Strong police posts were accordingly stationed in the chief villages. In November 1820 a general insurrection broke out, and the police were massacred. Thereupon a second force was despatched, which in three months thoroughly subjugated the country, and the ringleaders of the rebellion were punished. The tract was at first divided between Ajmere and the States of Udaipur and Jodhpur, Captain Tod, the historian of Rájputána, being placed in charge of the Mewár or Udaipur portion; but this triple government proving weak and ineffectual, the British authorities entered into an arrangement with the two Rájput States in May 1823 and March 1824 for the management of the whole territory. Colonel Hall was the first officer appointed. A strong personal administration, adapted to the needs of a people only just emerging from predatory life, was rigorously and successfully imposed. Civil and criminal justice was administered by *panchayat* or arbitration among the elders of the village. If two-thirds of the *panchayat* were agreed, their decision settled the question. The revenue was collected by an estimate of the crops, and, generally speaking, the share of the State was one-third. In 1851, a regular settlement was effected by Colonel Dixon.

Shortly after British occupation, a native force, known as the Merwára Battalion, transformed the wild mountaineers into brave and disciplined soldiers, whose influence on the pacification of the country cannot be overvalued. Meanwhile, facilities for the adoption of an industrial system were afforded by the construction of numerous tanks, and the foundation of BEAWAR or Náyanagar, the commercial and administrative capital of the tract. Merwára rapidly underwent a great social change. The ancient hill villages of the robber tribe, perched upon lofty and inaccessible peaks, were deserted for commodious agricultural centres in the cultivated valley beneath. The character of the people has kept pace with their altered circumstances, and habits of honest industry have replaced the old plundering proclivities. Until 1842, Merwára formed a separate District; but in that year it was incorporated with Ajmere, under the management of a Deputy Commissioner (*see* AJMERE-MERWARA). It now constitutes a Sub-division of the Ajmere-Merwára District, and forms the charge of an Assistant Commissioner. The inhabitants consider themselves Hindus, but pay little respect to the prejudices of their co-religionists, and are ignorant of the most common tenets of Hinduism. Even the Bráhmans eat meat, and drink spirits freely. The Meráts, who are aborigines converted to Islám, number 8339. Like the aborigines who have adopted Hinduism, they are absolutely ignorant of the rules and religion of Muhammadanism. Beáwár, the only town in Merwára, was the creation of Colonel Dixon.

Mesána.—Town in the Mesána Sub-division of Baroda territory, Bombay Presidency. Lat. 23° 42′ N., long. 72° 36′ 30″ E. Population (1881) 8791, namely, 4450 males and 4341 females. Station on the Rájputána-Málwá Railway, 43 miles north of Ahmadábád.

Mettapolliem (*Mettupálayám*).—Town in Coimbatore District, Madras Presidency, and the terminus of the Nílgiri Branch South-West Line, Madras Railway; situated in lat. 11° 19′ N., and long. 76° 59′ E., on the Bhaváni river. Population (1881) 652, inhabiting 242 houses. Revenue from tolls on the traffic to the Nílgiris, £630.

Mevli.—Petty State in the Pándu Mehwas group, Rewá Kántha, Bombay Presidency. Area, 5 square miles, containing one parent village and four hamlets. Four shareholders. The Karad river divides the estate into two nearly equal parts. The part north of the river is rich; that south of the river is uncultivated, growing only grass. Estimated revenue in 1881, £235; tribute of £150, 2s. is paid to the Gáekwár of Baroda.

Mewár (*Meywar*, the Middle Country).—State in Rájputána.—*See* UDAIPUR.

Mewása.—Petty State in the Jhálawár division of Káthiáwár, Bombay Presidency; consisting of 6 villages, with two separate shareholders. Area, 24 square miles. Population of Mewása village (1881) 293; of the petty State, 1175. Situated 36 miles south-west of Wadhwán station, the north terminus of the Bhaunagar-Gondal Railway. Estimated revenue, £620; tribute of £44, 10s. is paid to the British Government, and £11, 8s. to the Gáekwár of Baroda.

Mewát.—An historical province of India, lying south of Delhi, and including parts of the British Districts of Muttra (Mathura) and Gurgáon, and a considerable portion of Alwar (Ulwur) and some of Bhartpur. It was for many centuries famous for the predatory character of its inhabitants, who at all times gave great trouble to their Pathán and Mughal neighbours at Delhi. In Mughal times, Mewát formed a part of the Subah of Agra. Its most famous towns were Nárnaul, Ulwur (Alwar), Tijára, and Rewárí. Rájá Mangal of Mewát, a Jadún Rájput, married the famous Prithwi Rájá's wife's sister. The Emperor Balban thoroughly conquered this wild country, and established police outposts in various parts. During the troubled times of Timúr's invasion, Bahádur Náhar Mewáti was one of the most powerful chiefs in this part of India; and he was the founder of the Khánzáda race, famous in the history of the Delhi Empire, and long the rulers of Mewát. At the time of Bábar's invasion, Hasan Khán Khánzáda, chief of Mewát, was ruling at Alwar, his family having moved thither from Tijára. Both Rájputs and Mewátis were defeated by Bábar at the battle of Fatehpur Síkri; Hasan Khán fell, and his son hastened to submit to the conqueror. Hemu, the great wazir of Adíl Sháh, who was defeated at the battle of

Pánípat in 1556, was a Mewáti of Machari; and this place, after the death of Hemu, opposed a stout resistance to Akbar's armies. Mewát, however, was once more subdued; and for a long time the Khánzádas were distinguished soldiers in the imperial armies. About 1720 A.D., in the reign of Muhammad Sháh, the Ját freebooters first appeared in Mewát; and between 1724 and 1763 they completely overran the country. In 1755, however, the fort of Alwar was taken from the Játs by Rájá Partáp Singh, the ancestor of the present Maháráo Rájá of

minister to the Nawábs Asaf-ud-daulá and Saádat Alí Khán. Lord Valentia in 1803 described it as a prosperous town; but Bishop Heber in 1823 found 'trees, towers, gates, and palaces sinking fast into rubbish and forgetfulness.' Population (1881) 3132, namely, 2069 Hindus and 1063 Musalmáns. Two masonry *saráis* for travellers, 13 mosques, and 4 Hindu temples. The village was the scene of a defeat of the mutineers in 1857.

were Kshattriyas by caste. The last of this line, Nisankhá Náráyan, died childless; and at his death the throne was usurped by a powerful aboriginal chief named Kálu Bhuiyá, who was the founder of the line of Kaibartta or fisher-kings of Tamlúk. The Kaibarttas are generally considered to be descendants of the aboriginal Bhuiyás, who have

are identical in name, and claim the same descent as the first 6 clans of the Mínas. The smaller clans are called *gôts.* Intermarriage between Meos and Mínas was the rule till the time of Akbar, when, owing to an affray at the marriage of a Meo with a Mína, the custom was discontinued. Finally, their mode of life is, or was, similar, as both tribes were notoriously predatory.

It is probable that the original Meos, together with other castes, became converts to Islám at the time of Mahmúd of Ghazní in the eleventh century. They have a mixture of both Musalmán and Hindu customs; they practise circumcision, *niká*, burial of the dead. They make pilgrimages to the tomb of the famous Sayyid Salár Masáúd in Bahráich in Oudh, and consider the oath taken on his banner the most binding; they also make pilgrimages to shrines in India, but never perform *haj.* Among Hindu customs they observe the *Holi* and *Diwáli* festivals; their marriages never take place in the same *gôt*, and their daughters never inherit; they call their children indiscriminately by both Musalmán and Hindu names. They are almost entirely uneducated, but have bards and musicians, to whom they make large presents. Songs, called *ratwái*, on pastoral and agricultural subjects, are common. The dialect is harsh and unpolished, so that no difference can be made when addressing a male or female, or with respect to social distinctions. They are given to the use of intoxicating drink, are very superstitious, and have great faith in omens. The dress of the men and women resembles that of the Hindus.

Infanticide was once common, but this is said to have entirely d
out. They were formerly robbers by avocation; and although improv
they are still noted cattle-lifters. The only approach to caste amo
them is that the descendants of Lál Singh (who became a *fakír*, a
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Mhaswad.—Town and municipality in Sátára District, Bombay Presidency; situated 51 miles east of Sátára town on the road to Pandharpur, in lat. 17° 38′ N., and long. 74° 49′ 50″ E. Population (1881) 5581. Hindus numbered 5242; Muhammadans, 227; and Jains, 112. Municipal income (1882–83), £238; incidence of taxation, $6\frac{3}{4}$d. The Rájwádi, a large tank for irrigation purposes, lies at a distance of about 6 miles from the town. Large fair held in December, at which cattle and blankets are sold. Post-office, dispensary, and two schools with 142 pupils in 1883–84.

Mhow (*Mhau*).—British cantonment in the Indore State, Central India. Head-quarters of a Division of the Bombay Army, and a station on the Málwá line of the Rájputána-Málwá State Railway; situated in lat. 22° 33′ N., and long. 75° 46′ E., on an elevated ridge between the Gambhír and Santer rivers; distant from Indore city $13\frac{1}{2}$ miles, from Khandwá 76 miles, and from Nimach (Neemuch) 163 miles. The cantonment is situated about 1 mile to the south-east of the village from which it takes its name; elevation above the sea, 1919 feet. Population (1881) 27,227, namely, 15,536 males and 11,691 females. Hindus numbered 17,143; Muhammadans, 6849; and 'others,' 3235. A considerable force is stationed here, in accordance with the terms of the treaty of Mandsaur. Church, three chapels, lecture-room, large library, arsenal, and theatre.

Mhowa.—Port and town on the south-east coast of the peninsula of Káthiáwár, Bombay Presidency.—*See* MAHUWA.

Miána.—*Parganá* of the Gwalior State, held in *jágír*, under the Gúna (Goona) Sub-Agency in Gwalior territory, Central India.

and cotton. Revenue of the *tahsíl*, £12,450. The administrative staff consists of an Assistant Commissioner and a *tahsíldár*, presiding

Miánganj.—Village in Mohan *tahsíl*, Unao District, Oudh; situated on an unmetalled road from Lucknow to Safipur, 12 miles west of Mohan town, and 18 miles north-east of Unao. Lat. 26° 48′ N., long. 80° 33′ E. A decayed town, built in 1771 by Mián Almás Alí, finance minister to the Nawábs Asaf-ud-daulá and Saádat Alí Khán. Lord Valentia in 1803 described it as a prosperous town; but Bishop Heber in 1823 found 'trees, towers, gates, and palaces sinking fast into rubbish and forgetfulness.' Population (1881) 3132, namely, 2069 Hindus and 1063 Musalmáns. Two masonry *saráis* for travellers, 13 mosques, and 4 Hindu temples. The village was the scene of a defeat of the mutineers in 1857.

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Midnapur District, including western and southern Hijili, coincides almost entirely with the Muhammadan *sarkár* of Jaleswar. That *sarkár* paid to the Mughal Emperor a revenue of 12½ *lákhs* of rupees (say £1,250,000), and had for its capital the town of the same name, which is now situated in BALASOR DISTRICT.

The first connection of the English with the District dates from 1760. In that year, the East India Company deposed Mír Jafar Khán, whom they had placed on the throne of Bengal three years before (after the battle of Plassey), and elevated his son-in-law, Mír Kásim Khán, to the Governorship. As the price of his elevation, Mír Kásim ceded to the Company the three Districts of Midnapur, Chittagong, and Bardwán, which were then estimated to furnish a third of the whole revenue of Bengal.

Midagesi.—Village in Madgiri *táluk*, Túmkúr District, Mysore State, at the eastern base of the Midagesi-dúrga. Lat. 13° 50′ N., long. 77° 14′ E. Population (1881) 768. Said to be named after a princess, who committed *satí*, and queens of the same family continued to govern it for some time. The place afterwards passed into the possession of the *pálegárs* of Madgiri, and suffered much during the wars between Haidar Alí and the Maráthás.

Midnapur.—District in the Lieutenant-Governorship of Bengal, lying between 21° 37′ and 22° 57′ N. lat., and between 86° 35′ 45″

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and 88° 14' E. long. Area, 5082 square miles. Population (1881), 2,515,802 souls. Midnapur forms the southernmost District of the Bardwán Division. It is bounded on the north by Bánkura and Bardwán Districts; on the east by the Districts of Húgli and Howrah and by the river Húgli; on the south by the Bay of Bengal; on the south-west by the District of Balasor, on the west by the Native State of Morbhanj and the District of Singhbhúm, and on the nor

of 2800 men and 12 pieces of artillery, encountered a Balúch ar numbering 22,000, strongly posted on the banks of the Fuleli. T enemy were totally routed, 5000 men being killed and wounded, the whole of their ammunition, standards, and camp taken, with siderable stores and some treasure. A monument marks the scen this great action, and on the eastern side of the pillar are inscr the names of the officers, and the number of rank and file, wh in battle. The spot is enclosed, and a well-kept garden laid

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purposes of navigation and irrigation. It runs almost due east and west, extending from the town of Midnapur to Ulubária on the Húglí, 16 miles below Calcutta, and affords a continuous navigable channel 53 miles in length. A full account of the canal will be found in *The Statistical Account of Bengal* (vol. iii. pp. 29–36); and in the subsequent article, MIDNAPUR HIGH LEVEL CANAL. There is also a tidal canal for navigation 26 miles in length, extending from Geonkhálí at the mouth of the Rúpnáráyan to the Rasulpur river in the Hijili portion of the District. The jungles in the west of Midnapur

yield lac, *tasar*-silk, wax, resin, firewood, charcoal, etc., and give shelter to large and small game — among the former being tigers, leopards, hyænas, bears, buffaloes, deer, and wild hogs; and among the latter, wild geese and ducks, snipes, ortolans, teal, hares, etc. Snakes are numerous.

History.—The early history of Midnapur centres round the ancient town of Tamlúk, which was in the beginning of the 5th century an important Buddhist settlement and maritime harbour. In the middle of the 7th century, Hiuen Tsiang, the celebrated pilgrim from China, describes Tamlúk as a great port, with ten Buddhist monasteries, a thousand monks, and a pillar by King Asoka 200 feet high. According to the earliest Hindu legend, it was distant from the coast about 8 miles; and so steadily has the process of land-making at the mouth of the Húglí gone on, that at present it is fully 60 miles from the sea. The earliest kings of Tamlúk belonged to the Peacock dynasty, and were Kshattriyas by caste. The last of this line, Nisankhá Náráyan, died childless; and at his death the throne was usurped by a powerful aboriginal chief named Kálu Bhuiyá, who was the founder of the line of Kaibartta or fisher-kings of Tamlúk. The Kaibarttas are generally considered to be descendants of the aboriginal Bhuiyás, who have embraced Hinduism. The present Kaibartta Rájá is the twenty-fifth in descent from the founder.

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The position of the District rendered it specially liable to invasion by the Maráthás from Orissa, and to predatory raids by the landholders of the jungle tracts in the west. These jungle *zamíndárs*, who called themselves Rájás, gave our early officers much trouble. They were described in 1778 as 'mere freebooters, who plunder their neighbours and one another; and their tenants are banditti, whom they chiefly employ in their outrages. These depredations keep the *zamíndárs* and their servants continually in arms; for after the harvest is gathered, there is scarcely one of them who does not call his tenants together,

either to defend his own property or to attack his neighbour.' Jaleswar town was for many years maintained as a frontier fort, to check the depredations of the Maráthás and of these robber Rájás; and even in the quiet and more civilised parts of the District, most of the wealthy landholders possessed fortified strongholds, which were necessary as places of retreat on occasion of the incursions of the Maráthás or the jungle chiefs.

One of the most troublesome of these chiefs was the Rájá of Morbhanj, who held a *parganá* in the Jungle Mahâls of Midnapur in addition to, and quite distinct from, his independent territory. The Government manuscript records contain frequent references to raids committed by him upon cultivators in the more settled parts of the District; and in 1783, soon after the rejection by the Governor-General of a territorial claim preferred by the Rájá, the latter was reported to be raising, in conjunction with another insurgent chief, an army for the invasion of the Company's Districts. A plan of joint hostilities was accordingly concerted with the Maráthá Governor of Orissa against the Morbhanj Rájá, who soon made his submission, and agreed to pay the yearly rental of £320 for his estate in Midnapur.

Many changes of jurisdiction have taken place. Hijili, which had up to 1836 been a separate Collectorate, was in that year annexed to Midnapur District, of which it has ever since remained part. Proposals have been made to separate it again; but, on the abolition of the Government salt monopoly, these were finally negatived. In 1872, the *parganás* of Chandrakoná and Bardá were transferred from Húglí to Midnapur. In 1876, a transfer of 45 villages was made from Singhbhúm to Midnapur.

Population. — Several attempts have been made to ascertain the population of Midnapur. One of the earliest was in 1802, when the population of the District as then constituted was estimated at a million and a half. The first real Census was taken in 1872, when it was found that the population, corrected according to the present area of the District, numbered 2,545,179 souls, or a density of 500 to the square mile. The last enumeration in 1881 returned the population of Midnapur District at 2,517,802, or a density of 495·4 per square mile, showing a decrease since 1872 of 27,377 persons, or 1·07 per cent. in nine years. The decrease in population is due to the ravages of the 'Bardwán fever,' an epidemic which first appeared in the Metropolitan District of the Presidency Division in 1862, and spread gradually throughout the western Districts of the Bardwán Division, on the opposite side of the Húglí, where it prevailed with the greatest virulence till 1874. Midnapur escaped lightly, as compared with other Districts of the Division, but it reached its maximum here in 1873; and it is estimated to have slain in this single District no less than a

quarter of a million, out of the two million victims of the disease throughout the Division.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 5082 square miles; 6 towns and 13,870 villages; number of houses, 445,191, of which 417,062 are returned as inhabited, and 28,129 as uninhabited. Total population, 2,517,802, namely, males 1,244,274, and females 1,273,528; proportion of males, 49·4 per cent. Density of population, 495·4 persons per square mile; towns and villages per square mile, 2·73; persons per town or village, 181; houses per square mile, 87·6; inmates per house, 6·04. The population varies, as regards density, very considerably in the different parts of the District, ranging from 1108 per square mile in Dáspur and 1039 in Tamlúk *thánd*, to 259 per square mile in the jungle tract of Sálbani, north of Midnapur town. Classified according to age, the population consisted of—children under 15 years of age, males 488,110, and females 443,341; total children 931,451, or 36·9 per cent. of the population: 15 years and upwards, males 756,164, and females 830,187; total adults, 1,586,351, or 63·1 per cent.

Classified according to religion, the population comprised—Hindus, 2,235,535, or 92·36 per cent.; Muhammadans, 164,003, or 6·51 per cent.; Sikhs, 44; Buddhists, 36; Christians, 740; Brahmos, 6; Pársís, 2; and tribes professing aboriginal religions, 117,436, of whom 112,062 were Santáls.

The aboriginal tribes found in Midnapur belong chiefly to the jungles and hills of Chutiá Nágpur and Bánkurá, and dwell for the most part in the west and south-west of the District; the most numerous of them are the Santáls enumerated above. Besides the aborigines by religion quoted above, the Census returns a total of 78,715 aborigines among the Hindu population. These Hinduized aborigines are thus classified—Bhumíjs, 25,258; Bhuiyás, 21,128; Kharwárs, 3847; Kochs, 2523; Santáls, 565; and 'others,' 25,394.

Of high-caste Hindus, the Census returns show 136,987 (of whom 117,414 are Bráhmans and 19,573 Rájputs); the number of Káyasths is given as 92,178; and the Baniyás or chief trading castes as 23,507. Among the semi-Hinduized aborigines, the most numerous are the Bágdís, a tribe of cultivators, fishermen, and day-labourers, who number 74,497, and the Baurís, who number 12,746. Belonging to agricultural castes, there are in Midnapur 753,435 Kaibarttas, who are the most numerous caste in the District, and form 33·7 per cent. of the Hindu population. The next great agricultural caste, the Sadgops, number 126,260, or 5·6 per cent. of the Hindu population. The other principal Hindu castes include—Tantí, 97,562; Telí, 68,239; Gwálá, 53,994; Nápit, 46,072; Kúrmí, 45,290; Dhobí, 41,607; Lohá, 38,741; Kumbhár, 30,650; Chandál, 27,826; Harí, 25,573; Jaliyá, 20,179;

Dom, 16,549; Barhai, 14,933; Pod, 13,660; Chamár, 13,387; Tambuli, 11,332; and Rájwar, 10,265. Caste-rejecting Hindus number 82,935, of whom 81,888 are returned as Vaishnavs.

The Christian community consisted in 1881 of 68 Europeans and Americans, 23 Eurasians, 646 natives, and 3 'others.' By religion, the Church of England numbered 134 adherents; Roman Catholics, 165; Baptists, 242; Church of Scotland, 91; Protestants, sect not stated, 46; Syrian Church, 10; Independents, 8; and 'others,' 44. The American Baptist Mission has a station in the District, and there are two small well-to-do native Christian communities, engaged in agriculture. The mission has established several village schools, a central training school in Midnapur town, and a printing press, at which the Bible was for the first time printed in Santálí.

Town and Rural Population.—The population of Midnapur District is almost entirely rural. Six towns are returned as containing upwards of five thousand inhabitants—namely, MIDNAPUR, 33,560; GHATAL, 12,638; CHANDRAKONA, 12,257; RAMJIBANPUR, 10,909; KHIRPAI, 6295; and TAMLUK, 6044. These towns, which are all municipalities, contained a total of 81,703 inhabitants in 1881, the urban population being thus only 3·2 per cent. of that of the District. Total municipal income in 1883–84, £4914, of which £3852 was derived from taxation; average incidence of taxation, 11¼d. per head of the town population. Of the 13,876 towns and villages comprising the District in 1881, no less than 10,272 contained less than two hundred inhabitants; 2711 had from two to five hundred; 712 from five hundred to a thousand; 157 from one to two thousand; and 24 upwards of two thousand inhabitants.

Tamlúk, which is now little more than a village, was in ancient times a famous city, and figures in the sacred writings of the Hindus as a kingdom of great antiquity. The earliest historical mention of the place is in the writings of the Chinese travellers Fa Hian and Hiuen Tsiang, to which reference has already been made. Even after the overthrow of Buddhism, it remained a place of great maritime importance and wealth. Among the objects of note at Tamlúk are a temple of great sanctity and of much architectural interest, dedicated to Bargabhímá or Kálí, and a Vishnuite shrine. Two seaside villages, BIRKUL and CHANDPUR, the former 26 and the latter 14 miles from the subdivisional station of Contai (Kánthí), have been proposed as watering-places and sanitaria for the people of Calcutta during the hot-weather months; but beyond the erection of a small rest-house at Chandpur, nothing has yet (1885) been done to provide suitable accommodation for visitors.

Agriculture.—Rice forms the staple crop of the District. It is of six kinds—(1) *áus*, the principal autumn crop; (2) *kákrí* and (3) *jhánji*, also reaped in the autumn; (4) *haimantik* or *áman*, and (5)

nuan, winter crops; and (6) *boro*, or spring rice. Of these, 79 varieties are named. The other crops of the District are wheat, barley, peas, linseed, mustard, *til*, flax, hemp, sugar-cane, indigo, cotton, mulberry, and *pán*. The greater part of the area of the District is cultivated, chiefly with rice. Previous to the transfer of certain portions of Húglí to Midnapur District in 1872, the area was returned at 4836 square miles, of which 4302 square miles were under cultivation, 156 were uncultivated but cultivable, and 378 square miles were returned as uncultivable jungle land. No later agricultural returns are available. The area under indigo was estimated in 1877 at about 20,000 acres; the crop is cultivated largely in Bagrí and Bahádurpur, and the *parganás* in the Jungle Maháls. A fair average out-turn from an acre of ordinary rice land, paying a rental of 9s., is about 26 cwts. of paddy, valued at £2, 8s. The same land would also yield a second crop of pulses or oil-seeds, valued at 15s. an acre; and the value of the straw may be set down as about 12s.; so that the total value of the produce would be £3, 15s. Superior rice land, producing only one crop, and paying a rent of 18s. an acre, might give an out-turn of 70 cwts. of paddy per acre, worth £6, 6s. Rents of land vary according to the quality of the soil, position, etc.; the lowest rate for rice land is 10½d., and the highest about 18s. an acre. For sugar-cane land, rents vary from 3s. 6d. to £1, 18s. an acre.

Irrigation is common in the District, and is chiefly effected from the High Level Canal, for which see the separate article, MIDNAPUR HIGH LEVEL CANAL.

Wages and prices have risen considerably of late years. In 1860, coolies and agricultural labourers received 1½d. to 1⅞d. a day; now they earn 2¼d. to 2⅝d. Smiths and carpenters, who formerly received 3d. a day, now get 4½d., and the wage for bricklayers has risen from 2¼d. to 3d. and 3¾d. The ordinary *bázár* rate for the best cleaned rice is 6s. 9d. a cwt., and for common rice, 4s. 4d. a cwt.; in 1860 the rates were about 25 per cent. cheaper. Among the tenures of land peculiar to this District may be mentioned *jálpái*, *páikán*, and *arzí piyádá's jágírs*. *Jálpái* lands are those which chiefly supplied fuel for boiling the brine from which salt was manufactured in the olden time. When Government monopolized the salt manufacture, it took these and other lands from the landholders, granting them remissions of rent and compensation for the loss of profits. The total area of *jálpái* lands in the District is 76,835 acres. *Páikán* lands are granted to *páiks* or village watchmen, and held either at a low quit-rent, or free of all rent except that represented by the service done by the holders to the *zamíndárs*. *Arzí piyádá's jágírs* are lands held revenue free, in lieu of salary, by the messengers and bailiffs attached to the Collector's office; the tenure is a very ancient one. A complete description of these, as well as of the more usual tenures prevalent in

the District, will be found in *The Statistical Account of Bengal*, vol. iii. pp. 86–100.

Natural Calamities.—Midnapur occasionally suffers from drought, but this is not, as a rule, of a serious character. On the other hand, floods, caused by the sudden rise of the rivers as well as by heavy rainfall, are common in the southern and eastern portions of the District, and are very disastrous in their results. Severe inundations occurred in 1823, 1831, 1832, 1833, 1834, 1848, 1850, 1864, 1866, 1868, and 1881. Some idea may be formed of the desolation occasioned, when it is stated that in the flood of 1834 more than half of the crops were swept away, over 7000 people—half the population of the flooded tract—were drowned, and 865 villages were inundated. The famine of 1866 was felt with greater severity in Midnapur than in any other part of Bengal proper. In 1864 the District had been devastated by a great cyclone, which swept away more than 33,000 of the population. The following year was one of extreme and protracted drought, and about half of the principal rice crop was lost. In October, the Deputy Magistrate reported that unless rain fell soon, 'he had no doubt there would be a famine, the like of which had not been seen or heard of for many years.' This gloomy forecast was unhappily fulfilled; and the great famine of 1866 literally decimated the population of the District. No accurate statistics of the mortality are available, but it was estimated by the Collector at about 50,000, or a tenth of the population in the tracts specially affected. The number of relief centres established in the District from first to last was 23, and the average number of persons relieved daily was—in June, 5155; in July, 7442; in August, 9606; in September, 8752; in October, 6476; and in November, 4247. A sum of £14,700 was expended on relief to the starving poor, in addition to nearly £15,000 spent on relief works. Rice reached, during the famine, the price of £1, 1s. 10d. a cwt., and unhusked rice, 10s. 11d.

Commerce and Trade, etc.—The commerce of the District is chiefly conducted by means of permanent markets, but a considerable local trade also goes on at fairs and religious gatherings. The principal exports are rice, silk, and sugar; the principal imports, cotton cloth and twist of European manufacture. The value of the exports and the imports is approximately equal.

The chief manufactures are indigo, silk, mats, and brass and copper utensils. The indigo of Midnapur, and specially that produced in the Jungle Maháls, is of first-rate quality. The manufacture is almost entirely in the hands of Messrs. R. Watson & Company. The average indigo out-turn of the District was estimated in 1877 at about 1800 *maunds*, valued at Rs. 200 to Rs. 275 (£20 to £27) per *maund*.

The manufacture of salt was carried on by the Government until

1861, when the State relinquished the monopoly, leaving the manufacture to private persons, subject to a payment of salt duty. This duty amounted in 1873 to 8s. 10d. a cwt. The manufacture has greatly declined, the introduction of Liverpool salt, which is brought out to Calcutta at very low rates, having driven the native article nearly out of the market. In 1786, the manufacture of salt in Hijili was estimated at over 31,116 tons.

There were in 1871, 482 miles of road in Midnapur, of which 252 miles were maintained from imperial and 230 miles from local funds. There are no railways in Midnapur, and the only means of communication besides the roads and large rivers is the High Level Canal already referred to, by means of which Midnapur town is placed in direct communication with Calcutta; and the coast canal from the Rúpnáráyan to the Rasúlpur river.

Two vernacular newspapers are printed in the District, besides the publications of the Mission Press. Public libraries exist at Midnapur, Ghátál, and Tamlúk.

Administration.—In 1790, the net revenue of Midnapur, exclusive of Hijili, which then formed a separate Collectorship, was £160,316; and the total civil expenditure, £36,681. In 1839-40, shortly after the addition of Hijili with its land revenue of £35,193 to Midnapur District, the total net revenue was £219,472; and the expenditure, £34,246. In 1870-71, the total net revenue amounted to £262,578, and the expenditure to £53,777. In 1883-84, the revenue of Midnapur District, from six principal sources, amounted to £344,096, made up as follows:—Land revenue, £259,945; excise, £21,431; stamps, £40,613; registration, £3471; road cess, £14,784; and municipal taxes, £3852. Sub-division of property has gone on rapidly under British rule. In 1790, the District, which was then smaller than it is now, contained 999 estates, held by 1043 proprietors or coparceners, paying a total land revenue of £80,791, or an average payment by each proprietor of £77, 9s. By 1870-71, the number of estates had increased to 2808, and of proprietors to 6358; the average land revenue demand from each proprietor being £31, 15s. 7d. In 1883-84, the number of estates had increased to 2956, and the individual proprietors to 21,932; the average land revenue demand from each shareholder being £11, 17s.

In 1805 there were only 2 magisterial courts and 2 covenanted English officers in the District; in 1883 there were 15 magisterial and 14 civil and revenue courts, and 6 European officers. For police purposes Midnapur is divided into 25 police circles (*thánás*). In 1883, the regular and municipal police force numbered 964 men of all ranks, maintained at a total cost to the State of £15,601. There was also a village watch of 8924 men, maintained by grants of land and

contributions from the people, at an estimated total cost, including both sources, of £17,291. The total machinery, therefore, for the protection of person and property consisted of 9888 officers and men, or 1 man to every half square mile of the area, or to every 235 of the population. The estimated total cost was £32,892, equal to an average of £6, 9s. 5¼d. per square mile, or 3d. per head of the population. The total number of cases conducted by the police in the same year was 7888, in which 7782 persons were placed on trial, and 4556 finally convicted. *Dakáiti* or gang-robbery is still not uncommon in the District; 17 cases occurred in 1883. In the same year there were 113 cases of salt smuggling, in which 111 persons were arrested, of whom 97 were finally convicted. There are 3 subsidiary lock-ups in the District, besides the central jail at Midnapur. In 1883, the daily average prison population was 814.

Education has spread with great rapidity of late years. In 1856–57, there were in the District only 14 Government and aided schools, with 1340 pupils; by 1870–71, the number of such schools had risen to 223, attended by 8125 pupils. In addition to these, there were in the latter year 1732 private and unaided schools, with an estimated attendance of 19,413 pupils. By 1883–84, nearly all the hitherto uninspected and unaided indigenous village schools had been received within the Government system of State education. In 1883, there were in all 4434 schools in Midnapur District, attended by a total of 80,591 pupils. Of the total boys of a school-going age, 1 in every 2·2 is at school. The principal educational institution is the Midnapur College with its attached Collegiate School, attended in 1883 by 307 pupils. The American missionaries have a Normal School for the training of teachers, at Bhímpur, consisting of both a male and female department, and attended in 1883 by 57 male and 29 female students. The passed students find employment in the jungle village schools. The Census Report in 1881 returned 76,864 boys and 1019 girls as under instruction in that year, besides 140,790 males and 1655 females able to read and write, but not under instruction.

Midnapur District is divided into 4 administrative Sub-divisions—namely, (1) the *sadr* or head-quarters Sub-division; (2) Tamlúk; (3) Contai (Kánthí); and (4) Ghátál. These again are sub-divided into 25 police circles (*thánás*), and 109 fiscal divisions (*parganás*).

Medical Aspects.—The climate of Midnapur does not differ from that of the Twenty-four Parganás. The average mean temperature is about 80° F., and the average annual rainfall about 66 inches. The prevailing diseases of the District are fevers, diarrhœa, dysentery, cholera, and small-pox. Cholera is said to be endemic in the town of Midnapur; and in the epidemic form the disease is of frequent occurrence, generally breaking out in the hot season. A very serious epidemic of small-pox

immediately followed the famine of 1866, and the inhabitants of Midnapur town suffered very severely. Another epidemic occurred in 1879. Epidemic fever, similar to that generally known as the Bardwán fever, also visits Midnapur; and in 1872 it assumed a very serious type. Between October of that year and the end of March 1873, the number of persons treated in the famine-stricken villages of Ghátál, Dáspur, Nárájol, and Sháhpur was 24,007, of whom 236 died. A detailed account of the fever is given in the *Statistical Account of Bengal* (vol. iv. pp. 179–190). The fever prevailed, with more or less virulence, as an epidemic for several years in Midnapur, during which time it is estimated to have cost a quarter of a million of lives in this single District. The total number of registered deaths in 1883 was returned at 51,846, equal to a ratio of 20·59 per thousand of the population. The District contains 9 charitable dispensaries, at which medical relief was afforded to 696 in-door and 40,885 out-door patients in 1883. A serious outbreak of cattle plague, which proved fatal to three-fourths of the animals affected, occurred in Midnapur in 1868. [For further information regarding Midnapur, see *The Statistical Account of Bengal*, by W. W. Hunter (Trübner & Co., London, 1876), vol. iii. pp. 17-247; Mr. H. V. Bayley's *Memorandum on Midnapur;* the *Bengal Census Report* for 1881; and the several Administration and Departmental Reports from 1880 to 1884.]

Midnapur. — *Sadr* or head-quarters Sub-division of Midnapur District, Bengal, lying between 21° 46′ 15″ and 22° 48′ 30″ N. lat., and between 86° 35′ 45″ and 87° 53′ 30″ E. long. Area, 3296 square miles; townships or villages, 8939; houses, 232,686. Total population (1872) 1,289,509; (1881) 1,269,255, showing a decrease of 20,254 since 1872, or 1·57 per cent. in nine years. This decrease is attributed to the ravages of epidemic fever, which prevailed between 1872 and 1875. Classified according to sex, males numbered 629,370 in 1881, and females 639,885. Hindus numbered 1,074,040; Muhammadans, 77,304; Christians, 514; Buddhists, 35; Brahmo, 1; Santáls following aboriginal religions, 111,987; other aborigines and unspecified, 5374. Proportion of males in total population, 49·6 per cent.; average density of population, 385·1 persons per square mile; average number of villages per square mile, 2·71; persons per village, 147; houses per square mile, 74·7; persons per house, 5·5. This Sub-division comprises the 11 police circles of Midnapur, Náráyángarh, Dántun, Gopíballabhpur, Jhárgáon, Bhímpur, Sálbani, Kespur, Debrá, Garhbeta, Sabang. In 1883 it contained 5 civil and 11 magisterial courts; the regular and municipal police consisted of 346, and the rural force of 5715 men.

Midnapur. — Chief town and administrative head-quarters of Midnapur District, Bengal; situated on the north bank of the Kásái

river, in lat. 22° 24′ 48″ N., and long. 87° 21′ 12″ E. Formally declared the head-quarters station of the District in 1783. Estimated population in 1837, 12,839; in 1869, 27,676; as ascertained by the Census of 1872, 31,491, and by the Census of 1881, 33,560, namely, males 16,927, and females 16,633. Classified according to religion, there were in 1881—Hindus, 25,930; Muhammadans, 7222; 'others,' 408. Area of town site, 3968 acres. The town has a large *bázár*, with commodious public offices, and handsome European residences, some of them old and stately. It is dry, well supplied with water, and has some charming views in the immediate neighbourhood.

An American Mission maintains an excellent training school, together with a printing press, and has founded village schools in the District. Its efforts have been particularly successful among the Santáls, and some of the earliest and most valuable works on that language have issued from the Midnapur Mission press. A brisk manufacture of brass and copper utensils takes place in the town; and it forms the local centre of a large indigo and silk industry, conducted by Messrs. Watson & Co. in the surrounding Districts. It is connected with Calcutta by a navigable canal and by a road to Ulubária on the Húglí, and thence by river or road to Calcutta, 68 miles distant. The high road from Calcutta to Orissa passes through Midnapur town, where there is a travellers' rest-house. A church, built in 1851, was consecrated in 1855; a charitable dispensary, established in 1835, afforded in 1884 relief to 502 in-door and 10,998 out-door patients. The Government and aided schools, English and vernacular, are numerously attended, and supply an excellent education at a small cost to the citizens. Midnapur has been constituted a municipality; municipal income (1883-84), £2799, of which £2425 was derived from taxation; rate of taxation, 1s. 5¼d. per head of population within municipal limits.

Midnapur High Level Canal.—A navigable and irrigation canal, extending from Midnapur town to Ulubária on the Húglí, 16 miles below Calcutta. The navigable channel has a length of 53 miles nearly due east and west, inclusive of the crossings of the rivers Kásái, Rúpnáráyan, and Dámodar. Exclusive of these crossings, the total length of canal cutting is 48 miles. The canal commences in lat. 22° 24′ N., and long. 87° 23′ E., and joins the Rúpnáráyan river in lat. 22° 26′ N., and long. 87° 55′ 30″ E. The canal is used for both irrigation and navigation. The Calcutta Steam Navigation Company maintains a daily steamer service between Midnapur and Calcutta; a daily service between Midnapur and Pánchkura; and a bi-weekly service to Ghátál. Steamers belonging to native firms ply daily to Pánchkura and Amptá, and twice a week to Ghátál. In 1883-84, the total revenue was as follows:—

From water rates, £13,100; navigation receipts, £12,058; and miscellaneous, £1299: total, £26,457. The working expenses (direct charges) in 1883-84 were £21,564, leaving a net profit of £4893. The total capital expenditure up to the end of 1883-84 amounted to £815,835. Apart from the steamers of the Calcutta Steam Navigation Company, which carried during the year 151,400 passengers and 3582 *maunds* of goods, the canal was navigated by 51,642 boats of an aggregate burthen of 383,979 tons, carrying cargo to the value of £1,795,380, and paying £10,903 in tolls. [For full details regarding the construction and various works connected with the canal, see *The Statistical Account of Bengal*, vol. iii. pp. 29-36.]

Mihndháwal.—Town in Basti District, North-Western Provinces.—*See* MENDHAWAL.

Mihrauni (*Mahrauni*).—Eastern *tahsíl* of Lálitpur District, North-Western Provinces; comprising the *parganás* of Mihrauni, Bánpur, and Máhraura, and consisting of a poor and unfertile plain, stretching down from the Vindhyan range towards the south, and much broken by stony hill and scrub jungle. Area, 888 square miles, of which only 230 square miles are cultivated. Population (1872) 93,664; (1881) 110,572, namely, males 57,193, and females 53,379. Total increase since 1872, 16,908, or 15·3 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 103,860; Jains, 4705; Muhammadans, 1994; and 'others,' 13. Number of villages, 294, of which 231 contained less than five hundred inhabitants, 42 from five to a thousand, and 21 from one to five thousand inhabitants. Land revenue, £7205; total Government land revenue, including cesses, £8832; rental paid by cultivators, including rates and cesses, £16,578. In 1884, the *tahsíl* contained 1 civil and 1 criminal court, 8 police stations (*thánás*), with 5 outposts (*chaukís*), a regular police force of 117 officers and men, with a village watch of 228 *chaukídárs*.

Mihrauni.—Village in Lálitpur District, North-Western Provinces, and head-quarters of Mihrauni *tahsíl*; situated in lat. 24° 22′ 50″ N., and long. 78° 50′ 35″ E., 24 miles from Lálitpur town. Population (1872) 2534; (1881) 2987. Mihrauni is connected by fair-weather roads with the neighbouring villages, but is of no commercial or other importance save as the sub-divisional head-quarters. The Government buildings include the usual *tahsílí* courts and offices, police station, Anglo-vernacular school, and post-office. For police and conservancy purposes a small house-tax is levied.

Mihrpur (*Meherpur*).—Sub-division of Nadiyá District, Bengal, lying between 23° 36′ and 24° 11′ N. lat., and between 88° 20′ and 88° 55′ E. long. Area, 632 square miles; towns and villages, 596; houses, 59,559. Population (1881) 338,554, namely, males 163,342,

and females 175,212; proportion of males in total population, 48·2 per cent. Hindus number 127,910; Muhammadans, 207,245; and Christians, 3399. Number of persons per square mile, 536; villages per square mile, 0·94; houses per square mile, 99; persons per village, 568; inmates per house, 5·7. This Sub-division comprises the 4 *thánás* or police circles of Teháta, Mihrpur, Karímpur, and Gángni. In 1883 it contained 2 civil and 3 magisterial courts; the regular police was 59 strong, and the village watch 716.

Mihrpur (*Meherpur*).—Town in Nadiyá District, Bengal, and head-quarters of Mihrpur Sub-division; situated on the Bhairab river, in lat. 23° 46′ 35″ N., and long. 88° 40′ 15″ E. Population (1881) 5731, namely, Hindus, 3824; Muhammadans, 1905; and 'others,' 2. Municipal income (1883–84), £287; rate of taxation, 11½d. per head of population. Manufacture of brass utensils; dispensary. Mihrpur is the centre of an important branch of the Church Missionary Society.

Míkír Hills and Tribe.—Tract in the Nowgong District, Assam, to the north of the Nágá Hills proper, chiefly occupied by the aboriginal tribe of Míkírs. The Míkír Hills constitute a very remarkable outlying block of the main range, reaching from the Gáro Hills to the Pátkái range in the Nágá Hills, but are completely cut off from it by the valleys of the Dhansiri (Dhaneswari) on the east, and by those of the Diyang, Jamuna, and Kopili rivers on the south-west. The Míkír communities extend from Nowgong to Cachar, and are said to have originally migrated or been driven into the Assam valley from the Jaintia Hills. Their head-quarters is in Nowgong District, where they number 47,497 persons; and Sibságar, where they number 15,548 out of a total of 67,516 in the Assam valley. Large numbers are still found in their original settlements along the foot of the Jaintia Hills (5546), and in Cachar, nearly all in the north Sub-division (3704); making in all 77,765 returned in 1881 as the total number of the Míkír race.

The Míkírs are universally described as the most pacific and industrious of all the hill tribes of Assam. They do not claim relationship with any other race, and the name by which they call themselves, Arleng, means simply 'a man.' They are divided into four tribes, known as Dumráli, Chintong, Ronghang, and Amri; each of which is again sub-divided into four clans or *phoids*, within each of which marriage is interdicted. Each little hamlet manages its own affairs. In their own hills, the Míkírs cultivate cotton and summer rice, according to the nomadic system of agriculture known as *jum*, in forest clearings made mostly on the slopes of the hills. Their implement is the hoe; cattle are not kept, and milk is regarded as impure. In the plains, however, they are giving up this prejudice and learning to cultivate winter rice with the plough. A Míkír village, or *cháng* (so called from the high platforms on which the houses are

raised ten or twelve feet above the ground), consists of single houses or disconnected groups scattered about the jungle, and constantly liable to change as their inhabitants shift their dwellings in search of fresh lands. Usually all the members of a family, however numerous, and sometimes more than one family, occupy a single house, which may thus be of very considerable size. This, however, is said to be due to the desire to evade the house-tax of Rs. 2. 4. per house. The houses are very strongly put together. Under the platforms live the pigs and fowls which contribute victims to the Míkír gods.

The principal deity of the Míkírs is Arnám Kethe, *i.e.* the great god, whom the western Míkírs are said to call Hajai. His victim is usually a pig. The sacrificial ground is a cleared space near every village, and the principal times for worship are the first days of the Hindu months of *Mágh*, *Baisákh*, and *Kártik*. The ground is swept clean and spread with leaves of wild plantain and wild cardamom (*tora*), upon which are placed offerings of flowers and rice. The pig is then introduced to Arnám Kethe by the medicine-man (*se kara kli*), who addresses the god in words to this effect: 'We have come here to offer to you all the things you see, and we hope in return that you will keep us safe.' The blood and some of the cooked food are offered to the god before the company eat. Once a year at least, all the people of a *cháng* meet together for this solemnity. Propitiatory offerings have also to be constantly made by individuals to evil spirits whose names and numbers are indefinite. Some are demons of the higher hills, of the streams, and even of large *bils*, or collections of water; and some are household devils, as Mukrang and Peng, who are worshipped in-doors by the family once or twice a month by way of disarming their malice. The list may be increased at any time by the discovery of new devils. In the case of sickness, meeting a tiger, or any other mischance, the medicine-man is called upon to divine the particular devil in fault, who is thenceforth propitiated by his new worshipper with yearly offerings of a fowl or goat.

The manes of the dead are also reckoned among the powers of evil. Míkírs burn their dead. The funeral service is held either at the time, or afterwards over the burnt bones, and consists in the offering of a victim to the spirit of the departed, followed by drinking, singing, and dancing, often kept up for several nights in succession, and always running into excesses which a more civilised people would consider shameful. Those who can afford it, set up an upright stone (*long-ê*) as a memorial of the deceased, with a flat horizontal stone (*long pât*) before it, to serve as a table for the offerings of rice occasionally supplied as food to the dead man.

Míkírs never marry before maturity. Polygamy is permitted if the man can afford it; on the other hand, a man too poor to support

a wife is not supposed to marry at all. Betrothal by parents seems to be unknown. If a man takes a fancy to a girl, he calls on her parents with a present of rice-beer, and if approved of by the young woman, he wins her by serving in her father's house for a term agreed on—usually two years—after which he carries off his bride to his own home. Social intercourse between the sexes is entirely unrestrained, and the women take an equal part in all the occupations, ceremonies, and diversions of the men. The Míkírs carry on a brisk traffic with the Hindus of the plains, bartering cotton and jungle products for salt and piece-goods; though they have hitherto yielded but little to the religious influence of Hinduism. The Míkírs were found very useful as coolies in the Lushai Expedition of 1871–72.

Milam (or *Juhár*).—Large village in Juhár *parganá*, Kumáun District, North-Western Provinces, the nearest village to the Juhár pass over the main Himálayan range into Tibet. Lat. 30° 25′ 30″ N., long. 80° 10′ 15″ E. According to Thornton, it is inhabited by Bhutias, who, however, have to a great extent adopted the Hindu customs and religion. Elevation of the crest above sea-level, 17,270 feet. Population (1881) 1865.

Milmillia.—Forest reserve of *sál* trees (Shorea robusta) in Kámrúp District, Assam, on the left bank of the Kulsí river. Area, 3558 acres, or 5·61 square miles. The new line of District road passes through the reserve.

Milur.—*Táluk* of Madura District, Madras Presidency.—*See* MELUR.

Minachal.—*Táluk* or Sub-division in Travancore, Madras Presidency. Area, 312 square miles. Minachal contains 90 *karas* or villages. Population (1875) 53,140; (1881) 57,102, namely, 29,120 males and 27,982 females, occupying 11,843 houses. Hindus numbered 28,822; Muhammadans, 1360; and Christians, 26,920.

Minbra.—Township in Akyab District, Arakan Division, British Burma. Divided into 12 revenue circles, and adjoins Kyauk-pyu District, to which were added, a few years ago, several circles from this township. In the south, the soil is good, cultivation extensive, and the country is much intersected by navigable creeks, which serve as means of communication. Portions of this tract are liable to inundation at high tides. Population (1877) 26,893; (1881) 28,816; villages, 233. In 1881–82, land revenue was £6790; capitation tax, £3270; net tax, £43; local cess, £675. Gross revenue, £10,778. Area under cultivation, 34,825 acres, mostly rice. Agricultural stock in 1881–82 comprised 4552 horned cattle, 1038 pigs, 267 goats, 4455 ploughs, 239 carts, and 1667 boats.

Mindun (or *Minpon*—'Prince's hiding-place,' so called from an incident in the early history of Burma).—Township in Thayet-myu District, Irawadi Division, British Burma; situated between 19° 5′ and

19° 30′ N. lat., and between 94° 30′ and 94° 45′ E. long. Area, 708 square miles. Bounded north by Upper Burma; east by Thayet township; south by Ka-ma; and west by the Arakan mountains. Population (1877) 26,039; (1881) 30,072, chiefly Burmese. Revenue in 1881–82, £42,672. The present township of Mindun includes Mindat. During the last two centuries, under the Burmese government, it was the residence of a Provincial governor of high rank, with full power of life and death, having jurisdiction over the tract known as the 'Seven Districts along the Hill.' The last Myo-sa or governor of Mindun was the late king of Burma, who, as enjoying the revenues of this tract which he never visited, received the title of 'Mindun' Prince, by which he was known previous to his accession. The township contains 45 registered village tracts. Total area under cultivation in 1881–82, 15,415 acres, of which 10,980 were under rice.

Mindun. — Head-quarters of the Mindun township, Thayet-myu District, Irawadi Division, British Burma; situated among the hills at a bend of the Mahtun river, in lat. 19° 20′ N., long. 94° 44′ E. Population (1881) 705, engaged chiefly in agriculture. Police station.

Min-gyi.—Township of Tharawadi District, Pegu Division, British Burma; situated on the east bank of the Irawadi river, extending eastwards to the Pegu Yoma.

Min-gyi.—Head-quarters of Min-gyi township, Tharawadi District, Pegu Division, British Burma. An important mart, from which the produce of the neighbouring country, principally rice and cutch, is exported down the Irawadi (Irrawaddy); situated 2 miles inland, eastward of the Irawadi. Population (1881) 1022. Police station.

Min-hla.—Township in Tharawadi District, British Burma. Hilly and forest-covered country towards the east; in the south is a good deal of rice cultivation. It includes the six revenue circles of Min-hla, Mataungda, Pauktaw, Lwin-byin, Senitwya, and Kyet-taik. Population (1876) 33,191; (1881) 50,309; villages, 262. In 1881–82, land revenue was £8560; capitation tax, £4358; fishery revenue, £713; net tax, £21; local cess, £938. Gross revenue, £14,590. Area under cultivation, 44,632 acres, mostly rice. Agricultural stock comprised 19,430 horned cattle, 597 pigs, 68 goats, 6547 ploughs, 5412 carts, 3569 sledges, and 61 boats.

Miráj (SENIOR BRANCH).—Native State under the Political Agency of the Southern Maráthá Country, Bombay Presidency. It consists of three divisions—a group of villages in the valley of the Kistna (Krishna); a second group in the south of Dhárwár District; and a third in the midst of villages of Sholápur District. Area, 340 square miles, containing 2 towns and 55 villages. Population (1872) 82,201; (1881) 69,732, namely, 34,354 males and 35,378 females, occupying 12,299 houses. Hindus numbered in 1881, 59,309; Muhammadans, 7473; and

'others,' 2950. The portion of the State which is watered by the Kistna is flat and very rich; the remaining parts lie low, and are surrounded by undulating lands, and occasionally intersected by ridges of hills. The prevailing soil is black. Irrigation is carried on from rivulets, tanks, and wells. As in the rest of the Deccan, the climate is always dry, and is oppressively hot from March to May. The principal products are millet, wheat, gram, sugar-cane, and cotton. Coarse country cloth and native musical instruments are the chief manufactures. Cholera and small-pox are prevalent.

Miráj was a grant by the Peshwá to a member of the Patwardhán family. In 1820 it was, with the sanction of the British Government, divided into four shares, and the service of horsemen was proportioned to each. Two of these shares lapsed in 1842 and 1845, from failure of male issue; the two others remain. The whole area of the State has been surveyed and settled. The present (1881-82) chief of the Senior Branch is Gangádhar Ráo Ganpat, a Bráhman. He was educated at the Rájkumar College at Indore, and ranks as a first-class Sardár in the Southern Maráthá country. He has power to try his own subjects only for capital offences, without the express permission of the Political Agent. Revenue (1882-83), £31,200. The chief pays tribute of £1256 to the British Government, and maintains a military force of 554 men. The family holds a *sanad* authorizing adoption, and follows the rule of primogeniture in matters of succession. Miráj and Lakshmeshwar are municipalities. There are 30 schools in the State, with a total of 2146 pupils, besides 16 indigenous schools. The police force numbers 328 men, maintained (1882-83) at a cost of £1730. Dispensary at Miráj town, affording relief, in 1882-83, to 9245 persons. In the same year 1762 persons were vaccinated.

Miráj (Junior Branch).—Native State under the Political Agency of the Southern Maráthá Country, Bombay Presidency. It consists of three divisions—a group of villages adjoining the Bankápur Subdivision of Dhárwár District; a second near the Tásgáon Sub-division of Satára District; a third near the Pandharpur Sub-division of Sholápur District, which includes four *inám* villages in Poona District. Area, 208 square miles, containing 35 villages. Population (1872) 35,601; (1881) 30,541, namely, 15,215 males and 15,326 females, occupying 5375 houses. Hindus numbered in 1881, 27,516; Muhammadans, 1667; and 'others,' 1358. The soil is generally black. Indian millet, wheat, gram, and cotton are the chief products; and coarse country cloth is the principal manufacture. The history of this branch of the family is the same as that of the Senior Branch (*vide supra*). The present (1881-82) chief of Miráj (Junior Branch), Lakshman Ráo Harihar, is a Bráhman. He ranks as a first-class Sardár in the Southern

Maráthá country, and has power to try his own subjects only for capital offences, without the express permission of the Political Agent. He is a minor, and the affairs of his State are managed by joint administrators under superintendence of the Political Agent. He enjoys an estimated gross yearly revenue of £16,300; pays tribute of £641 to the British Government; and maintains a military force of 270 men. Strength of police, 219 men. The family holds a *sanad* authorizing adoption, and follows the rule of primogeniture in matters of succession. There are 18 schools in the State, attended by 916 pupils. Dispensary at Budgáon, which in 1882 afforded relief to 3651 persons. In the same year 951 persons were vaccinated.

Miráj.—Town in the State of Miráj (Senior Branch) in the Political Agency of the Southern Maráthá Country, Bombay Presidency; residence of the Chief; situated in lat. 16° 49′ 10″ N., and long. 74° 41′ 20″ E., near the Kistna (Krishna) river, a few miles south-east of Sangli. Population (1872) 22,520; (1881) 20,616, namely, 9902 males and 10,714 females. Hindus numbered 15,931; Muhammadans, 4080; Jains, 604; and Christians, 1.

Míránpur.—Town in Muzaffarnagar District, North-Western Provinces; situated 20 miles south-east of Muzaffarnagar town, in lat. 29° 17′ 15″ N., long. 77° 59′ 25″ E. The town stands in the midst of country watered by the Ganges Canal. Population (1872) 5924; (1881) 7276, namely, Hindus, 4400; Muhammadans, 2800; and Jains, 76. Area of town site, 119 acres. A small house-tax is levied for police and conservancy purposes. Famous family of Sayyids, descendants of Haidar Khán. Míránpur was attacked by the Bijnaúr rebels on 4th February 1858, but successfully defended by the British troops.

Míránpur Katra.—Town in Tilhár *tahsíl*, Sháhjahánpur District, North-Western Provinces; situated on the metalled road from Sháhjahánpur to Bareilly, 18 miles from Sháhjahánpur town, and 6 from Tilhár, in lat. 28° 1′ 30″ N., long. 79° 43′ 30″ E. Population (1872) 6529; (1881) 5949, namely, Hindus 3478, and Muhammadans 2471. Area of town site, 105 acres. A small house-tax is levied for police and conservancy purposes. The town, which is also a station on the Oudh and Rohilkhand Railway, with a large traffic, contains two mud-built *saráis* or native inns, a post-office, police station, and dispensary. Market days on Sundays and Thursdays. In 1774, the British army lent to Shujá-ud-daulá, Nawáb of Oudh, defeated the Rohillás at this spot.

the north, and made settlements in the country now occupied by the Abars, and that the latter people, of the same race but more powerful,

Mírath.—Division, District, *tahsíl*, and town in the North-Western Provinces.—*See* MEERUT.

Mírganj.—North-western *tahsíl* of Bareli (Bareilly) District, North-Western Provinces, bordering on the Rámpur State, and comprising the old *parganás* of Ajáon, North Sarauli, and Sháhi, the former occupying the west, Sháhi the east, and Sarauli a small portion of the south-west of the *tahsíl.* At the last assessment of the land revenue of the District (1872), however, these three *parganás* were amalgamated into the single *parganá* of Mírganj, the area of which is co-extensive with the present *tahsíl.* Mírganj is a level, well-cultivated plain, studded with groves, and traversed or bounded by several rivers or watercourses. Area, 153¾ square miles, or 98,340 acres, of which 82,452 acres are under cultivation, 15,393 acres cultivable but not under tillage, 5794 acres revenue-free, and 10,040 acres uncultivable waste. Of the cultivated area, 43·7 per cent. is returned as loam (*dúmat*), 37·4 per cent. as clay (*matiyár*), and 18·9 per cent. as sand (*bhúr*). The greater portion of the fields lie low, and are kept naturally moist by accumulations of rain. It is only the more valuable crops on the higher levels which require artificial irrigation. Mírganj is a purely agricultural tract, with hardly any manufactures. Rice, maize, and *bájra* are the chief staples of the autumn, and wheat of the spring harvest. Numerous market villages are available for the distribution of the surplus produce, the chief of which are Mírganj, the present, and Dunka, the old head-quarters of the *tahsíl.*

The population of Mírganj *tahsíl* in 1872 was returned at 97,551; and in 1881 at 100,939, namely, males 52,907, and females 48,032. Total increase since 1872, 3388, or 3·5 per cent. in the nine years. Density of population, 658 persons per square mile. Classified according to religion, there were in 1881—Hindus, 82,956, or 82·1 per cent.; Muhammadans, 17,971, or 17·8 per cent.; and 'others,' 12. Number of villages, 158, of which 73 contained less than five hundred inhabitants. The landed classes are chiefly Rájputs, Bráhmans, Káyasths, Shaikhs, and Patháns; while among the tenantry, Kisáns, Kúrmís, Bráhmans, Rájputs, Muráos, and Chamárs are the most numerous classes. The average size of each cultivated holding, including lands cultivated by the proprietors themselves, is 4·9 acres. About three-fourths of the cultivated area is held by tenants with rights of occupancy. The Government land revenue at the time of the last Settlement (1872) was fixed at £13,489, or including local rates and cesses levied on the land, £14,925. Total rental paid by cultivators, including cesses, £24,682. Mírganj *tahsíl* contained in 1883, 1 criminal court, with 2 police circles (*thánás*), a regular police force numbering

family is the same as that of the Senior Branch (*vide supra*). The

vinces, and head-quarters of Mírganj *tahsíl;* situated on the metalled Bareli and Moradábád road, 21 miles north-west of Bareilly city. The

place is a mere village, with a population consisting principally of Patháns. The public buildings consist of the usual *tahsíli* courts and offices, police station, post-office, elementary school, and mud-built *sarái* or native inn. Outside the village, on the north-west, is an encamping ground for troops, in the neighbourhood of which the market is held twice a week.

Mírganj.—Trading village and produce depôt in Rangpur District, Bengal. Chief trade—rice, jute, and tobacco.

Mírí.—An aboriginal tribe, or rather the most important section of the Abar group of tribes, inhabiting the mountains between the Assam valley and Tibet, and also settled to some extent (especially the Míris) in the valley Districts, where they follow a system of nomadic cultivation. The other tribes, or branches of the same race, are the ABARS, AKAS, and DAPHLAS, a brief description of which will be found, *ante*, vol. i. p. 1, and p. 135, and vol. iv. p. 119. The language spoken by all sections of the race is practically one and the same. In geographical order, beginning from the eastern borders of Assam, the location of these tribes is as follows:—Akás, a tribe closely allied to the Daphlás, but who have hitherto made no settlements in the plains; then the Daphlás; next the hill Míris; and finally the Abars, at the eastern end of the valley.

The Míri tribe ranks first in point of importance among these tribes, and is the only one which has effected any considerable settlements in the Assam Districts. In 1872, the number of Míris in British territory was returned at 13,917; and in 1881 at 25,636, inhabiting the Districts of Lakhimpur (11,687), Sibságar (10,836), and Darrang (3113). The increase is mainly due to the settlement of new colonies of immigrants since 1872. The following description of these people is taken, in a condensed form, from the Assam Census Report of 1881, and Colonel E. T. Dalton's *Ethnology of Bengal* (Calcutta, 1872):—

The Míris are divided among themselves into two mutually exclusive sections, known as the Báragám, or twelve-clan, and Dahgám, or ten-clan Míris. The Míris now settled in the plains of Assam are claimed by the Abars as runaway slaves; and they themselves, while not actually confessing this, admit that hostilities with the Abars were the cause of their leaving the hills. Many of the Mírí clans have been established in Assam for ages, and one of their settlements on the Dikrang is known as that of the *khalás* or freed Míris. With the exception of the clan called Chutia Míris, the traditions of all of them take them back to the valley of the Dihong. It is probable they had advanced from the north, and made settlements in the country now occupied by the Abars, and that the latter people, of the same race but more powerful, following on their footsteps, pushed them down into the plains. They are of the yellow Mongolian type, tall and powerfully framed, but with

a slouching gait and sluggish habits. For a long period under the Assam Government, the Míris managed to keep to themselves the entire trade between Assam and the Abars; and as being thus the only medium of communication between the two peoples, they obtained this name Míri, which means mediator or go-between.

The principal crops raised by the Míris are—summer rice, mustard, maize, and cotton, sown in clearances made by the axe and hoe in the forest or reed jungle. Their villages, usually placed on or near the banks of a river, consist of a few houses built on platforms four or five feet from the ground, presenting a strong contrast to the ordinary Assamese village, with its orchards of betel, palm, and plantain, and its embowering thicket of bamboos. Under the houses live the fowls and pigs which furnish the village feasts; and the more prosperous villages keep herds of buffaloes, although the Míris, like others of the non-Aryan tribes of Assam, eschew milk.

The Míris are a strong, well-nourished race, who eat all descriptions of animal food, although some of the settlements in the plains have abandoned the use of beef since they have come into contact with the Hindus. Child-marriage is unknown among them. Betrothal may take place at childhood, but marriage is deferred until the young couple are able to set up house for themselves. Often the bridegroom-elect has to serve for his wife, perhaps several years, in the house of his father-in-law. The women weave their own petticoats of coarse cotton cloth in stripes of grey colours wrought with dyes obtained (as they say) from the Khamptis. Another article of domestic manufacture is the Míri rug (*jím*), made of cotton ticking on a backing of thick cloth. Upon the men alone devolves the labour of first clearing the jungle or felling the forest; but the use of the long Míri hoe is familiar to both sexes, and the women certainly take their full share of field labour. The Míris bury their dead.

The religion of the Míris is of a very rude and vague character. Nekirí Nekirán (or Mekiri and Mekiran) seem to be the departed spirits of their male and female relatives, who require to be propitiated on the occasion of any small or great mischance. They also reverence the sun (*doinya*), the heaven (*talang*), and the earth (*mobáshine*). The intermediary between these deities and mankind is the *Míbî* or *Mimbua*, a kind of sacrificial priest or medicine-man. The function is so far hereditary that one of the sons of a Mimbua will usually be a Mimbua; but the election depends upon the deity, who may just as easily choose an outsider. The process of vocation is thus described. About the age of eighteen, the favourite of the god is driven by the spirit into the jungle, where he remains for many days unsupported by any food except what he finds there. He comes home a changed person, able thenceforth to commune with the invisible world, and to answer all

manner of questions by intuitive knowledge; he also possesses the gifts of prophecy and of healing by prayer. The Báragám Míris, as older residents of the valley, have partly fallen away from their old religion. Nekirí and Nekirán serve them well enough for small domestic occasions, but in public worship (*bor khewa*) they invoke Sankar and Parameswar; and though it is still the Mimbua who officiates, the ordeal of vocation has been dispensed with or forgotten. Whatever the deity, the essentials of worship are the same, consisting of the sacrifice of a fowl, a pig, or on great occasions a buffalo, and the drinking of rice-beer.

The Míris, like other wild tribes, are distinguished by the Assamese into *bhakatia* and *abhakatia*, according as they are or are not followers of a Gosáin, or spiritual teacher. Their Gosáins are chiefly those of Sibságar District, on the south bank of the Brahmaputra, though the great majority of the Míri settlements are on the north bank or in the island of Májhuli, itself the seat of some of the chief Gosáins in Assam. Their connection with the Gosáin, however, is rather temporal than spiritual. It is worth their while to secure him as their friend by presents of a few annas yearly, and a portion of mustard and pulse, according to each man's means and inclination; but they have no Bráhmans, nor do they adore any idol. In some places, however, they had been prevailed on to leave off eating buffalo's flesh. That they are sinking into the mass of the Hindu population, however slowly, is proved by the existence of the class known as *máti* or ground Míris, who have given up their national custom of platform-houses and taken to living on the ground,—a change which signifies also a departure from many other national customs, religion included.

The hill Míris, living beyond British territory and along the upper waters of the Subansirí river, include numerous clans, the best known of which are the Ghy-ghási, the Sárák, the Pánibotiá, and the Tarbotia Míris. These tribes having, under the native government of Assam, obtained a sort of prescriptive right to levy black-mail on the Lakhimpur villages skirting their hills, now receive annually from the British Government an equivalent in the form of a money payment. In language and in many of their customs they resemble, and are no doubt of common stock with, the Abars; but they differ from them greatly in form of government, and in many social observances and customs.

The following description of the hill Míris, their system of Government, customs, cultivation, etc., is quoted from Colonel Dalton's *Ethnology of Bengal*:—'They' (the hill Míris) 'live in small communities under hereditary chiefs, and in some instances one family has obtained sufficient influence to be acknowledged as chief over clusters of communities. They have no *morang* or common hall, in which the elders meet and consult during the day; nor do the youths, armed for

the protection of the village, keep watch by night. They have no regulation for the safety of the commonwealth, like the Abars; nor does each settlement consist of only one family, as amongst the Táin Míshmís. The village consists of ten or a dozen houses of as many families, built pretty closely together, in some position difficult of access; and it is left to the chief to look after its safety as best he can. . . .

'The chief who befriended me in my excursion to the hill Mirí villages was Temá, the head of the Pánibotiá clan. After a journey of three days and a half from Patálipan in canoes up the river, I met him and his people at the point called Siplumukh, and thence proceeded by land. Two long marches over a most difficult road, impracticable for any quadruped except a goat, and equally impracticable for a biped who had not the free use of his hands as well as his feet, brought us to the settlement. My baggage was nearly all carried on the heads of sturdy-limbed hill lasses, who merrily bounded like roes from one slipping rock to another, laughing at my slow progress. I found the villages situated on hills to the north of the great range seen from the Lakhimpur station, which I had crossed. They were small, consisting each of not more than ten or a dozen houses, and two or three miles apart. Every village had its *gám* or chief, but my friend Temá was looked upon as head of the clan. On the arrival of the first British officer ever seen in the hills, fowls were killed in every village by augurs, with the view of ascertaining, from the appearance of the entrails, if the visit boded them good or ill. Fortunately the omens were all pronounced favourable, and the people vied with each other in treating me and my party with kindness and hospitality.

'A description of Temá's house will suffice for all, and show how they live. It is 70 feet long; the flooring is of split bamboos on a very substantial framework of timber raised several feet from the ground; the roof has gable ends, and is thatched with leaves; under the gable, a cross sloping roof covers an open balcony at each end. The interior consists of one long apartment 60 feet by 16, from which a passage at one side, extending the entire length, is partitioned off in the large apartment down the centre. Four fires burn on hearths of earth. On one side, neatly ranged, were the arms, pouches, marching equipments; another portion of the hall was decorated with trophies of the chase; in the centre, between the fires, frames of bamboos suspended from the roof served as tables, on which various domestic utensils were deposited. In the passage partitioned off there was nothing but a row of conical baskets lined with plantain leaves, in which the grain was undergoing its process of fermentation for the production of their favourite beverage. The liquor slowly percolated into earthen vessels placed underneath, and was removed for use as they

filled. In the large apartment, the whole family eat, drink, and sleep; Temá and his two wives at the upper end or first fire, his sons and daughters round the next, and servants and retainers round the third and fourth. Fearful of being pillaged by the Abars, they do not venture to display much property in their houses. Their stores of grain are kept in houses apart from the village, and their valuables buried. The latter consist chiefly of large dishes and cooking vessels of metal, and of great collections of Tibetan metal bells called *deogantas*, which appear to be prized as holy things, and are sometimes used for money. The Mírís pretend that they cannot now obtain these bells, and that those they possess are heirlooms. They are valued at from 4 *ánnás* to Rs. 12 (6d. to £1, 4s. od.) each, according to shape, size, and ornaments. Those with inscriptions inside and out are most highly prized. Those without inscriptions are little valued; and as the inscriptions are nothing more than repetitions of the shibboleth, "Om Mání padmi om," of the Tibetans, it is easy to see that the Mírís must have been inspired by that people to treat them with such veneration. The superstition regarding them should be compared with the veneration of the Gáros for the vessels called *diokoras*, also, it is believed, of Tibetan manufacture.

'The costume of the ladies of this clan is elaborate and peculiar. A short petticoat extending from the loins to the knees is secured to a broad belt of leather, which is ornamented with brass bosses. Outside this they wear a singular crinoline or petticoat of cane-work. The upper garment consists of a band of plaited cane-work girding the body close under the arms, and from this in front a fragment of cloth depends, and covers the breasts. This is their travelling and working dress; but at other times they wrap themselves in a large cloth of *eriá* silk of Assamese manufacture, doubled over the shoulders and pinned in front like a shawl. They have bracelets of silver or copper, and anklets of finely plaited cane or bamboo. Their hair is adjusted with neatness, parted in the centre and hanging down the back in two carefully plaited tails. In their ears they wear most fantastic ornaments of silver. A simple spiral screw of this metal, winding snake-like round the extended lobe of the ear, is not uncommon amongst unmarried girls; but this is only an adjunct of the complicated ear ornaments worn by married ladies. They wear round their necks an enormous quantity of large turquoise-like beads made apparently of fine porcelain, and beads of agate, cornelian, and onyx, as well as ordinary glass beads of all colours.

'The men of the Mírí clan have fine muscular figures; many of them are tall, at least over five feet eight inches. In feature they generally resemble the Abars; but they have admitted Assamese into their fraternity, and the expression of some is softened by this admixture of

race. They gather the hair to the front, where it protrudes from the forehead in a large knot secured by a bodkin. Round the head a band of small brass or copper knobs linked together is tightly bound. Chiefs wear ornaments in their ears of silver, shaped like a wine glass, and quite as large. A cap of cane or bamboo work with a peak behind is worn when travelling, and over this a piece cut out of a tiger or leopard skin, including the tail, which has a droll appearance hanging down the back. Their nether garment is a scarf between the legs fastened to a girdle of cane-work; and their upper robe, a cloth wrapped round the body and pinned so as to resemble the Abar's sleeveless coat. As a cloak and covering for their knapsack, they wear over the shoulders a half cape made of the back hairy fibres of a palm tree, which at a distance looks like a bear's skin. Their arms are the bow and arrow and long straight sword, the arrows being generally poisoned. They also make shafts from a species of bamboo, which is said to be naturally poisonous.

'The time of the men is chiefly occupied in journeys to the plains, with loads of *manjít* and other produce, or in hunting. They have various methods for entrapping animals of all kinds, from an elephant to a mouse, and all is food that comes to their net. The flesh of a tiger is prized as food for men; it gives them strength and courage. It is not suited for women; it would make them too strong-minded.

'Polygamy is practised to a great extent by the chiefs. There is no limit, but his means of purchase, to the number of wives a man may possess; and (as amongst the Míshmís) when he dies, his son or heir will become the husband of all the women except his own mother. . . .

'With the poorer classes, a man has to work hard to earn the means of buying a wife; and from this, the practice of polyandry results in a few instances.

'. . . The Mírí women make faithful and obedient wives. . . . They are trained never to complain or give an angry answer; and they appear to cheerfully bear the hard burden imposed on them, which includes nearly the whole of the field labour, and an equal share of the carrying work of their journeys to the plains.

'Every village has a certain extent of ground to which their cultivation is limited, but not more than one-fifth of this is under cultivation each season. They cultivate each patch two successive years, then suffer it to lie fallow four or five years, taking up instead the land that has been longest fallow. They have, like the Abars, a superstition which deters them from breaking up fresh ground so long as their available fallow is sufficient,—a dread of offending the spirits of the woods by unnecessarily cutting down trees. Their crops are—*áus* rice, millets, Indian corn, yams, sweet potatoes, tobacco, and red-pepper; but they barely grow sufficient for their own consumption, and would often be

very hard pressed for food if it were not for the large stock of dried meat they take care to have always on hand. Not less than two-thirds of the Pánibotiá Mírís spend several months of the year in the plains; and their main occupation whilst there is to procure meat and fish, dry it, and carry it back to the hills.

'There are no people on the face of the earth more ignorant of arts and manufactures than the Mírí tribe. They are decently clad, because they can exchange the wild produce of their hills for clothes, and they purchase cloth with the money received from Government as black-mail commutation; but they cannot make for themselves any article of clothing, unless the cane bands and bamboo crinolines can be so called. The most distant tribes, their cognates, manufacture coarse cotton cloths; but though the Mírís are in constant communication with them, as well as with the people of the plains, they have not the remotest idea of weaving. They cannot journey two or three days from their village without having to cross a considerable river. If it be not fordable, a rough raft of *káku* bamboos (Bambusa gigantea) is hastily constructed; but though constantly requiring them, and annually using them in their journeys to the plains, they have never yet attempted to construct a canoe. This is the more strange as the Abars of the Dihong river make canoes for use and for sale.

'The religious observances of the Mírís are confined to the slaughter of animals in the name of the sylvan spirits, and vaticination by the examination of the entrails of birds when the deities have been invoked after such sacrifices. They profess a belief in a future state, and have an indefinite idea of a god who presides in the region of departed souls; but as they call this god Jam Rájá, he is believed to be the Hindu Yama.

'They, however, bury their dead as if they were sending them on a long journey, fully clothed and equipped with arms, travelling-pouch, and caps, in a deep grave surrounded by strong timbers to prevent the earth from pressing on them; nor do they omit to supply the departed with food for his journey, cooking utensils, and ornaments, according to the position he enjoyed in life, in order that Jam Rájá may know whom he has to deal with. They attach great importance to their dead being thus disposed of, and buried near the graves of their ancestors. If a man of rank and influence die in the plains, his body is immediately conveyed to the hills to be so interred, should the disease of which he died be not deemed contagious.

'Of migrations, or their own origin, the hill Mírís can only say that they were made for the hills and appointed to dwell there; and that they were originally much farther north, but discovered Assam by following the flights of birds, and found it to their advantage to settle on its borders. There can be no doubt that the hill Mírís do their

utmost to deter the people of the wild clans to the north from visiting the plains; but the north-men occasionally creep down bearing heavy loads of *manjít*, and, beyond looking more savage and unkempt, they are undistinguishable from the poorer class of Mírís. They are described, however, as living in detached houses, as, whenever they have attempted to form into a society, fierce feuds and summary vengeance, or the dread of it, soon break up the community. Thrown on their own resources, they have acquired the art of forging their own *dáos*, which the Mírís know not, and their women weave coarse narrow cloths.'

Mírkásarái.—Town and police station (*tháná*) of the head-quarters Sub-division, Noákháli District, Bengal; recently transferred to this District from Chittagong. Situated in lat. 22° 46′ 4″ N., and long. 91° 37′ 10″ E., on the old Imperial High Road from Dacca to Chittagong. Population (1881) under 5000.

Mírpur.—*Táluk* in Rohri Sub-division, Shikárpur District, Sind, Bombay Presidency; situated between 27° 19′ and 28° 8′ N. lat., and between 69° 13′ and 70° 11′ E. long. Area, 1720·7 square miles. Population (1872) 42,127; (1881) 39,112, namely, 21,169 males and 17,943 females, dwelling in 84 villages and 7172 houses. Hindus number 4230; Muhammadans, 31,898; Sikhs, 976; and aboriginal tribes, 2008. Gross revenue (1881–82), £8361. In 1882–83, the area assessed to land revenue was 44,515 acres, and the area actually cultivated 38,174 acres. In 1884, the *táluk* contained 3 criminal courts; police stations (*thánás*), 7; regular police, 38 men.

Mírpur.—Town in Rohri Sub-division, Shikárpur District, Sind, Bombay Presidency, and head-quarters of the *múkhtiárkár* of Mírpur *táluk;* 55 miles north-east of Rohri town. Lat. 28° 1′ 15″ N., long. 69° 35′ E. Contains a court-house and treasury, and a *tappádár's* office; also a travellers' bungalow, post-office, and police lines. Population inconsiderable. Small trade in grain and *ghí*. The town was founded by Mír Musú Khán Talpur about 1739 A.D., and is a station on the Sind, Punjab, and Delhi Railway.

Mírpur.—Town in the Frontier District, Upper Sind, Bombay Presidency; situated in the Thal *táluk*, 20 miles east of Jacobábád, in lat. 28° 11′ N., long. 68° 46′ E. It has a *tháná* or police circle, and is the head-quarters of a *tappádár*. Considerable trade in grain, and a manufacture of embroidered shoes.

Mírpur Batoro.—*Táluk* in Sháhbandar Sub-division, Karáchí (Kurrachee) District, Sind, Bombay Presidency; situated between 24° 28′ and 25° N. lat., and between 68° 12′ and 68° 27′ E. long. Area, 268 square miles. Population (1872) 31,645; (1881) 32,179, namely, 17,924 males and 14,255 females, dwelling in 1 town and 74 villages, with 6298 houses. Hindus number 3727; Muham-

madans, 27,865; Sikhs, 229; aboriginal tribes, 354; and Christians, 4. Gross revenue (1881–82), £6743. In 1882–83, the area assessed to land revenue was 66,252 acres, and the area actually cultivated 27,372 acres. In 1884, the *táluk* contained 1 civil and 2 criminal courts; police stations, 5; regular police, 43 men.

Mírpur Batoro.—Chief town and municipality of the Mírpur Batoro *táluk* in Sháhbandar Sub-division, Karáchí District, Sind, Bombay Presidency; situated in lat. 24° 44′ N., and long. 68° 17′ 30″ E., on the Fatiah Canal, 13 miles north-east of Sujáwal, and 26 north of Mugalbhin. Head-quarters of a *múkhtiárkár* and a *tappádár*. Contains a *bázár*, *dharmsála*, etc. Population (1881) 3102. Municipal income (1881–82), £437; incidence of taxation, 1s. 10¾d. Large export of grain; transit trade in cloth, *ghí*, and miscellaneous articles. The main industries of the place are dyeing, and the manufacture of country liquor.

Mírpur Khás.—*Táluk* of Hála Sub-division, Haidarábád (Hyderábád) District, Sind, Bombay Presidency; situated between 25° 12′ 45″ and 25° 48′ N. lat., and between 68° 54′ and 69° 17′ 30″ E. long. Area, 561·4 square miles. Population (1872) 22,449; (1881) 24,979, namely, 13,737 males and 11,242 females, dwelling in 39 villages, with 5128 houses. Hindus number 4367; Muhammadans, 17,222; Sikhs, 697; and aboriginal tribes, 2693. Gross revenue (1880–81), £6587. In 1882–83, the area assessed to land revenue was 66,518 acres, and the area actually cultivated 22,935 acres. In 1884, the *táluk* contained 2 criminal courts; police stations (*thánás*), 4; regular police, 25 men.

Mírpur Khás.—Chief town of the Mírpur Khás *táluk*, Hála Sub-division, Haidarábád District, Sind, Bombay Presidency; situated in lat. 25° 31′ 45″ N., and long. 69° 3′ E., on the Letwah Canal, and also on the high road to Haidarábád and Umarkot, 38 miles south-east of Hála, and 41 miles east-north-east of Haidarábád *viâ* Alahyar-jo-Tanda (17 miles distant). Contains a staging bungalow and the usual public offices. Population (1881) below 2000. Local trade in grain, cotton (said to be the finest in Sind), and piece-goods, valued at £4200. The annual value of the transit trade is estimated at £5700. Mírpur is a comparatively modern town, having been built in 1806 by Mír Alí Murád Talpur. It was the capital of Mír Sher Muhammad Khán Talpur, whose army was defeated in 1843 by Sir Charles Napier at Dabba (Dabo) near Haidarábád.

Mírpur Sákro.—*Táluk* in Jerruck (Jhirak) Sub-division, Karáchí (Kurrachee) District, Sind, Bombay Presidency. Area, 1108 square miles. Population (1872) 22,614; (1881) 21,711, namely, 11,809 males and 9902 females, dwelling in 16 villages, with 4290 houses. Hindus numbered 1959; Muhammadans, 19,531; and Sikhs, 221.

Gross revenue (1883), £3759. The town of Mírpur Sákro lies in lat. 24° 33′ N., and long. 67° 40′ E. In 1882-83, the area assessed to land revenue was 28,271 acres, and the area actually cultivated 13,457 acres. In 1883, the *táluk* contained 2 criminal courts; police circles (*thánás*), 5; regular police, 35 men.

Mirta.—Town in Jodhpur State, Rájputána.—*See* MERTA.

Mírzápur.—District in the Lieutenant-Governorship of the North-Western Provinces, lying between 23° 51′ 30″ and 25° 31′ N. lat., and between 82° 9′ 15″ and 83° 36′ E. long. Area, 5223 square miles. Population (1881) 1,136,796 persons. Mírzápur forms the southernmost District of the Benares Division. It is bounded on the north by Jaunpur and Benares; on the east by the Bengal Districts of Sháhábád and Lohárdagá; on the south by the Sargujá Tributary State; and on the west by Allahábád District and the territories of the Mahárájá of Rewá. The administrative head-quarters are at the city of MIRZAPUR.

Physical Aspects.—The District of Mírzápur extends over a larger area than any other in the North-Western Provinces, and exhibits a corresponding diversity of natural features. It has an extreme length of 102 miles from north to south, and an average width of 52 miles from east to west. The mountain ranges of the Vindhyas and the Káimur, crossing it in the last-named direction, mark out the country into several well-defined physical divisions. The tract north of the Vindhyas forms part of the alluvial valley of the Ganges, and extends across either bank of the sacred river. The portion on its left or northern bank consists of a perfectly level plain, presenting the usual characteristics of the Gangetic lowlands. From its southern bank the District slopes upward gradually to the Vindhyan Hills, whose sandstone spurs descend to the river near Bindáchal and at Chanár (Chunar), while projections and ravines run down into the plain along its whole southern boundary.

The high plateau between the Vindhyas, which overlook the Ganges, and the Káimur range, which overhangs the valley of the Son (Soane) to the south, has a length of about 70 miles, with a breadth varying from 20 to 30 miles. It consists of a table-land with an elevation of from 300 to 500 feet above the plain, or from 600 to 800 feet above sea-level. The Karamnása takes its rise in this middle region, but does not become a considerable river until it debouches upon the Gangetic plain near Kera Mangraur. The eastern portion of the plateau comprises the southern half of Kera Mangraur *parganá*, a revenue-free estate, forming a portion of the family domains of the Mahárájá of Benares, which has been set apart as a vast preserve for deer and large game shooting. This tract, which is known as *táluk* Naugarh, is intersected everywhere by low-wooded ridges, with

intervening valleys watered by hill torrents, which find their way, some to the Karamnása, some to the Chandraprabha, and so to the plains and the Ganges beyond. The whole *táluk*, nearly 300 square miles in extent, is a vast forest, with here and there a few clearings, each containing one or more villages interspersed at wide intervals over its surface. The scenery is among the wildest and most beautiful in the District. The tract called the Dáman-i-Koh, where the hills meet the plains, is specially picturesque. The Karamnása reaches the plains by a succession of leaps, including two falls known as the Deodari and the Chhanpathar, which, from their height and beauty, are deserving of special notice. The lesser stream of the Chandraprabha leaves the plateau at Purwadari by a single cascade, 400 feet in height, whence it passes through a gloomy and precipitous gorge, 7 miles in length, to the open country beyond.

After passing the crest of the Káimur hills, a more rugged, imposing, and elevated range than the Vindhyas, an abrupt descent of 400 or 500 feet leads down into the third tract, the valley of the Son (Soane) and its tributaries. The valley is reached by several more or less practicable passes, the finest and easiest of which is the Kiwái *ghát* above Markundi, on the Chanár-Sargujá road. The basin of the main river itself lies at the foot of the Káimur chain, and comprises a strip of alluvial land stretching about 4 miles on either side of its bed. Next, as the traveller moves southward, come the transverse valleys of its affluents, the Rehand and Kanhar, flowing at right angles to the Son, and separated from one another by low hill ridges. Finally, in the extreme south, the Singrauli basin, between the Rehand and the Pángan, consists of a low-lying depression, composed of metamorphic rocks, overlaid in part by glacial boulder beds and coal strata. Alluvial deposits of black loam fill in the centre of the basin. The Son is navigable during the rainy season, when rafts of wood and bamboos are floated down to Patná, near its mouth.

The eastern portion of the plateau has extensive tracts of low jungle, interspersed with larger trees; while the Son valley is widely covered with forest, and presents beautiful scenery, deep and thickly wooded gorges from the Káimur range penetrating far into the hollow beneath, forming a fine contrast with its flat and tame appearance. Mírzápur is the only District of the North-Western Provinces which stretches to any great extent from the alluvial Gangetic plain into the central rock-area of India; and its geological features comprise most of the characteristic formations of the peninsula. Tigers, leopards, and bears occur commonly in the southern jungles; while *sámbhar*, hyænas, wolves, wild hog, spotted deer, *nílgái*, and antelopes abound in many parts. As a rule, game birds are very scarce in Mírzápur, and the aquatic species particularly so.

History.—Mírzápur has always formed part of the Benares Province, and its annals under the Rájás of Benares belong rather to the account of that District. To this day, the whole of the Bhadohi and Kera Mangraur *parganás* are included among the family domains of the Mahárájá, who exercises considerable revenue powers.

The earlier chronicles of the District centre around the towns of MIRZAPUR and CHANAR. The latter stronghold, perched upon a projecting sandstone outlier of the Vindhyan range, derives its name from the footprint of a deity, who descended upon the spot during the heroic period. Long afterwards, Bharti Náth, King of Ujjain, a younger brother of the famous hero Vikramáditya, became a religious devotee, and settled upon this hill. His shrine still remains one of the holiest places in India.

At a more historic date, Prithwi Ráj took up his abode at Chanár (Chunar), and brought the surrounding tract under cultivation. After his death, Khair-ud-dín Sabuktagín conquered the country from his successor, and a mutilated inscription over the gateway of Chanár fort commemorates its ransom from the hands of a Musalmán invader. It fell once more before a general of Muhammad Sháh, who appointed a Bahelia as governor of the fort. The family of the Bahelias retained the office, with a permanence very rare in Indian history, till the surrender of the fortress to the British after the battle of Buxar (Baksár) in 1764. Sher Khán, the Rohillá, obtained possession of Chanár in 1530 by marrying the widow of its late commandant; and two years later, Humáyún besieged and captured the place. In 1575, the Mughals again took Chanár, and settled the neighbouring country. About 1750 it came into the hands of Rájá Balwant Singh of Benares. Unsuccessfully besieged by Major Munro in 1763, Chanár passed under British rule after the victory of Buxar in the succeeding year. In 1781, Warren Hastings, when trying to coerce Rájá Chait Singh of Benares, had to take refuge at Chanár from August 21st to September 30th; when Cháit Singh fled to Gwalior, after a vain resistance to Major Popham's force at Latífpur.

After the establishment of Mahip Náráyan Singh as Rájá of Benares in the place of his rebellious kinsman, the District disappears from history till the date of the Sepoy Mutiny in 1857. At first only a Sikh guard had charge of the treasury at Mírzápur, but after the outbreaks at Benares on the 1st and at Jaunpur on the 5th of June, Colonel Pott arrived with part of the 47th Native Infantry. The Sikhs were called in to Allahábád on the 8th; and next day, strong rumours of intended attacks by the rebels being current, all the officers, except Mr. Tucker, retired to Chanár. On the 10th, Mr. Tucker attacked and defeated the insurgents; and on the 13th, a detachment of the 1st Madras Fusiliers arrived at Mírzápur, and destroyed Gaura, a stronghold of the river

dakáits. In Bhadohi *parganá*, Adwant Singh, head of the Thákurs, rebelled, but was captured and hanged. The Thákurs vowed vengeance, attacked Mr. Moore, Joint-Magistrate of Mírzápur, at Páli factory, and murdered him, together with two planters, while endeavouring to make his escape. On the 26th June, the Bánda and Fatehpur fugitives arrived and passed on to Allahábád. On the 11th August, the Dinapur mutineers entered the District, but were put to flight by three companies of the 5th, and left Mírzápur at once. Kuár Singh, the rebel *zamíndár* of Sháhábád District, made an incursion on the 8th September after his defeat at Arrah, but the people compelled him to pass on to Bánda. On the 16th, when the 50th Native Infantry mutinied at Nagod, the officers and 200 faithful men marched through Rewá to Mírzápur. No further disturbance occurred till Mr. Tucker made an expedition against Bijáigarh in January 1858, drove the rebels across the Son, and re-established order, which was not again disturbed.

Population. — The Census of 1853 returned the total number of inhabitants at 1,104,315. By 1865 the number had decreased to 1,055,735, showing a decrease of 48,580, or 4·6 per cent., although the area had increased meanwhile by 48 square miles. The enumeration of 1872 disclosed a further fall to 1,015,826, being a decrease of 39,909 persons, or 3·9 per cent., although the area had again increased by 17 square miles. The total decrease for the 19 years ending in 1872 amounted to 88,489 persons, or 8·7 per cent., in spite of an increase of area amounting to 65 square miles, or 1·2 per cent. The density of population, which was 214 persons per square mile in 1853, fell to 203 in 1865, and to 195 in 1872. No apparent reason for these facts can be alleged, except the decadence in the commercial prosperity of Mírzápur city. In 1881, however, the Census showed an increase, and returned the total population above that of 1853. In 1881 the population of Mírzápur District numbered 1,136,796, showing a density of 217·6 persons per square mile, as against 214 per square mile in 1853, 203 per square mile in 1865, and 195 per square mile in 1872. The total increase between 1872 (on an area corresponding with that of the present District) and 1881 was 120,970, or 11·97 per cent. in the nine years.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 5223 square miles; towns, 3; and villages, 4352; density of population, 217·6 persons per square mile; villages per square mile, ·8; persons per town or village, 261; houses per square mile, 33·8; inmates per house, 6·4. Total population, 1,136,796, namely, males 567,304, and females 569,492; proportion of males, 49·9 per cent. Classified according to age, there were—under 15 years of age, males 226,306, and females 210,458; total

children, 436,764, or 38·4 per cent. of the District population: 15 years and upwards, males 340,998, and females 359,034; total adults 700,032, or 61·6 per cent.

As regards religion, the District still remains almost exclusively Hindu, the adherents of that creed numbering 1,061,998, or 93·4 per cent.; as against 73,507 Muhammadans, or 6·4 per cent. Sikhs numbered 388; Jains, 200; Christians, 701; and Brahmos, 2. The ethnical division of the Hindus yielded the following results:—The higher castes comprised—Bráhman, 165,489, the most numerous caste in the District; Rájput, 51,065; Káyasth, 12,404; and Baniyá, 25,606. The other important Hindu castes, according to numerical superiority, are returned as follows:—Chamár, skinners and field labourers, 142,826; Ahír, cowherds, 111,156; Mallah, boatmen, 80,408; Kúrmí or Kunbí, landholders and cultivators, 67,429; Káchhí, landholders and cultivators, 41,834; Kahár, palanquin-bearers, water-carriers, and labourers, 28,751; Telí, oilmen, 24,388; Lohár, blacksmiths, 23,837; Gadária, shepherds, 22,771; Pásí, village watchmen, labourers, and cultivators, 21,937; Kalwár, distillers, 18,094; Kumbhár, potters, 17,684; Nái, barbers, 15,873; Bayár, cultivators, 13,092; Loniyá, salt-workers, 11,671; Dhobí, washermen, 11,094; Halwái, confectioners, 7943; Bánsphor, workers in bamboo, 7116; Sonár, goldsmiths, 5438; and Bhurjí, 5292. The Bhars, or representatives of the aboriginal tribe once dominant in the North-west, are now represented in Mírzápur by only 3169 low-caste labourers and cultivators. The other aboriginal and semi-aboriginal tribes include—Kol, 31,970; Kharwár, 14,280; Bind, 8376; and Cheru, 4307. These aboriginal and quasi-aboriginal tribes are all returned as Hindus in religion.

The Muhammadan population, 73,507 in number, are almost entirely of the Sunní or orthodox sect; only 1090 being returned as Shiás, and there are no representatives of other sects. By race or family, the Muhammadans include Shaikhs, Sayyids, Mughals, Patháns, and 349 Muhammadan Rájputs belonging to the Gaharwár family in Kera Mangraur. The Christian population of Mírzápur, 701 in number, include 433 Europeans, 46 Eurasians, and 222 natives, representing, according to sect, the Churches of England and Rome, Presbyterians, Baptists, Wesleyans, Syrians, Congregationalists, and Evangelicals. Besides the Christians in Mírzápur town, there are small Christian communities at Chanár, Ahraura, Dúdhí, and in one or two other villages.

Urban and Rural Population.—The population of Mírzápur District is almost entirely rural, the Census Report returning only three towns as containing upwards of five thousand inhabitants, namely, MIRZAPUR, 56,378; AHRAURA, 11,332; and CHANAR, 9148. These three towns represent an urban population of 76,858, or 6·7 per cent., leaving

1,059,938, or 93·3 per cent., as the rural population. Of 4355 towns and villages, 2597 are mere hamlets of less than two hundred inhabitants each; 1253 villages contain between two hundred and five hundred; 395 between five hundred and a thousand; 88 between one and two thousand; 12 between two and three thousand; and 10 upwards of three thousand inhabitants. The population in the tract south of the Káimur range is very rude and uncivilised; and the villages, which are of the smallest, are few and far between.

As regards occupation, the Census of 1881 distributes the male population into six great classes, as follows:—The first or professional class number 8884, amongst whom are included 5102 persons engaged in civil government service, 222 military, and 3560 in professions, literature, art, and science. The second or domestic class number 2183, comprising all private servants, washermen, water-carriers, barbers, sweepers, innkeepers, etc. The third or commercial class number 15,716, including all shopkeepers, money-lenders, bankers, brokers, etc., 4823; and pack-carriers, cart-drivers, etc., 10,893. Of the fourth or agricultural class, besides the 253,432 males engaged in agriculture, arboriculture, and horticulture, the Census returns include 3321 persons engaged in pastoral pursuits, making a total of 256,753. The fifth or industrial class number 50,811, including all persons engaged in the industrial arts, and mechanics, such as dyers, masons, carpenters, perfumers, etc., 1841; weavers, tailors, cotton-cleaners, etc., 17,243; grain-parchers, confectioners, etc., 10,397; and dealers in all animal 1117, vegetable 7415, and mineral 12,798 substances. The sixth or indefinite class number 232,957, including labourers, 29,915, and male children and persons of no specified occupation, 203,042.

Agriculture.—Of a total surveyed area of 5223·3 square miles, no less than 2280 square miles are unassessed for Government revenue. This unassessed area comprises the Government estate of *parganá* Dudhi, the large revenue-free estates of the Mahárájá of Benares, the Rájá of Singrauli, and the Rájá of Kántit. Of the remaining area (2942·8 square miles) paying Government revenue or quit-rent, 1264·4 square miles are returned as under cultivation, 409 square miles as cultivable but not cultivated, and 1269·4 square miles as uncultivable waste. The part of Mírzápur which lies in the Ganges valley north of the Vindhyas, is very highly cultivated and thickly populated on both sides of the river, like other Districts of the Benares Division; but the tract south of the Vindhyas, including the central plateau and the country beyond the Káimur Hills, consists largely of ravines and forests, with a very sparse population. The soil of the Ganges valley is exceedingly fertile, except where the sandstone rocks jut out from the Vindhyan plateau. The fine black soil which fills the hollow of the central table-land also produces good crops of rice, wheat, barley,

and gram. The two usual harvests, *kharíf* in autumn, and *rabí* in spring, have their ordinary staples of rice, millets, and *moth*, or of wheat, barley, linseed, and pulses respectively. In both harvests, much land is occupied by mixed crops. Barley grows over the whole District, even in the wildest parts. The rains are usually so abundant as to supersede the necessity of irrigation for the autumn harvest; but the spring crops require artificial watering, which they obtain from the numerous tanks and wells.

The total male adult agricultural population of Mírzápur District in 1881 was returned at 253,432, with an average of 3·98 acres of cultivated land for each. Landed proprietors numbered 7549; estate agents or servants, 1146; cultivators, 169,507; and agricultural labourers, 75,230. The total agricultural population of all ages and both sexes, dependent on the soil, however, amounted to 780,549, or 68·66 per cent. of the District population. The total of the Government land revenue assessment in 1881, including local rates and cesses, amounted to £96,256, or an average of 2s. 3⅞d. per cultivated acre. Total amount of rental paid by cultivators, including cesses, £291,919, or an average of 5s. 9½d. per cultivated acre.

The District being a permanently settled one, no statistics are available regarding the area under each description of crop. It may, however, be stated that rice covers fully a third of the total *kharíf* area, with *joár* and *bájra* next in importance. Of the *rabí*, the wheat and barley together make up considerably more than half, and the pulses and oil-seeds about one-eighth each. The area under opium in 1881–82 was 4100 acres. The usual vegetables, both indigenous and acclimatized, are grown; and in the neighbourhood of Ghoráwal, the raising of *pán* (Piper betle, *Linn.*) is an extensive industry.

The prevailing land tenure in the Government assessed lands is that known as imperfect *pattidárí*, a tenure by which part of the land is held in common, and part in severalty; Government revenue and village expenses are paid from a common stock; and any deficiency is made up according to a rate levied on the cultivation of each member of the community. Of the 4352 villages included in the District, 1485 are within the domains of the Mahárájá of Benares. These are partly held by sub-proprietors, known as *manzúrídárs*, who differ from *zamíndárs* under Government in little else but the smaller proportion (about 20 per cent.) of the gross assets which they enjoy. The remaining or *na-manzúrí* villages are those in which no sub-proprietors have been recognised, or in which their rights have lapsed. These are usually farmed. The great estates of Kántit and Agori-Barhar account for 734 more villages, in only about 50 of which sub-proprietary tenures exist.

The general condition of the cultivating classes is above the average,

except in a few of the more densely peopled parts of the Gangetic plain. In the upland there is still much land waiting for hands to till it; and in these parts the demand for labour, and the unlimited pasturage, add to the means of the poorer classes. But there is little thrift, and with harvests almost entirely dependent on the rainfall, a bad season brings with it a good deal of distress.

Wages have risen within the last twenty years. Between 1850 and 1880, those of bricklayers have increased from 3d. to 7½d. per diem; of blacksmiths, from 4½d. to 6d. or 7d.; of agricultural labourers, from 1½d. to 3d. or 4d. Price of food-grains ruled as follows in 1876:—Wheat, 23 *sers* per rupee, or 4s. 10d. per cwt.; rice, 11 *sers* per rupee, or 10s. 2d. per cwt.; *joár*, 31 *sers* per rupee, or 3s. 7d. per cwt.; *bájra*, 29 *sers* per rupee, or 3s. 10d. per cwt. The average rate for food-grains in 1883–84 was returned as follows:—Wheat, 16½ *sers* per rupee, or 6s. 10d. per cwt.; barley, 26 *sers* per rupee, or 4s. 4d. per cwt.; *bájra*, 23 *sers* per rupee, or 4s. 10d. per cwt.; *joár*, 25 *sers* per rupee, or 4s. 6d. per cwt.; gram, 23 *sers* per rupee, or 4s. 10d. per cwt.; and common rice, 12½ *sers* per rupee, or 8s. 11d. per cwt.

Natural Calamities. — Although the northern part of the District suffered severely from the famine of 1783, none of the droughts within the present century have seriously affected its prosperity. Even the disastrous season of 1868–69, which proved so calamitous to the Benares Division generally, was mitigated in Mírzápur by a timely fall of rain in September. In 1864 and 1865 the rains were scanty, and most of the rice crop perished; but Government suspended one-fifth of the revenue demand for the year, and during the succeeding prosperous seasons most of the cultivators recovered their position. The south of the District, however, suffered severely in the drought of 1873. Hail and blight often affect the spring harvest. The Ganges valley is not liable to inundation within the borders of Mírzápur.

Commerce and Trade, etc.—The city of Mírzápur formerly carried on a flourishing business in cotton, grain, and other raw materials; but since the opening of the through railway to Bombay *viâ* Jabalpur (Jubbulpore), and the rise of Cawnpur to commercial importance, much of its trade has migrated elsewhere. Considerable manufactures of shell-lac, brass-ware, and carpets still exist. The Ganges forms one of the main channels for merchandise, but a large quantity of goods are sent southward towards the Deccan. The East Indian Railway traverses the northern portion of the District, from east to west, running close to the right bank of the Ganges throughout its course. It has a total length of 53 miles within the borders of Mírzápur, with stations at Ahraura Road, Chanár, Pahári, Mírzápur city, and Gáipura. The Grand Trunk Road also traverses the District for 23 miles. The Great Deccan Road, once of the first importance, but now comparatively

deserted, leaves Mírzápur city at its southern extremity, and crosses the Vindhyas by a pass at Tára Ghát. Numerous other roads connect the smaller towns and villages. Total length of road communication, 1014 miles.

Administration.—The District staff ordinarily comprises a Collector-Magistrate, a Joint Magistrate, an Assistant Magistrate, a Deputy Magistrate and Collector, and a Deputy Superintendent for the domains of the Mahárájá of Benares, together with the usual medical, fiscal, and constabulary officials. Mírzápur forms the head-quarters of a civil and sessions judge, whose jurisdiction does not extend beyond this District. The whole amount of revenue, imperial, municipal, and local, raised within the District in 1876 was £114,377, out of which sum the land-tax contributed £84,503. In 1883–84, the total revenue of Mírzápur was £153,802, of which £94,146 was derived from the land revenue. The District contains 19 magistrates and 14 civil and revenue judges of all sorts. The maximum distance of any village from the nearest court is 60 miles, the average distance being 40 miles. The total regular police force in 1883 numbered 521 officers and men, and the municipal or town police, 270, maintained at a total cost of £8133, of which £6357 was defrayed from provincial revenues, and £1776 from other sources. This gives 1 policeman to every 6·60 square miles of the area, and every 1437 of the population. The regular and town police was further supplemented by a body of 1362 *chaukídárs* or village watchmen, maintained at a cost of £4942. The District jail at Mírzápur contained during the same year a daily average of 194 prisoners, of whom 179 were males and 15 females. Education was afforded in 1883 by means of 159 schools (9 of which were for girls), with an aggregate roll of 5908 pupils, being at the rate of 5·1 pupils to every thousand of the population. For fiscal and administrative purposes, the District is sub-divided into 3 *tahsíls*, 11 *parganás*, 4 *tappás*, 2 *táluks*. Municipalities have been formed at Mírzápur city and Chanár. Their aggregate revenue in 1883–84 amounted to £7755; from taxes, £6056, or 1s. 2¾d. per head of the population (98,296) within municipal limits.

Medical Aspects.—The climate of Mírzápur is slightly warmer and damper than that of Districts farther north and west. The hilly southern tract especially suffers from excessive heat, and Chanár has also a bad character as a summer station. The rainfall exceeds the average of the North-Western Provinces, owing probably to the forests and hill ranges with which the District abounds. The mean annual rainfall for a period of upwards of 30 years ending 1881 amounted to 41·84 inches; the maximum during that period being 54·1 inches in 1870–71, and the minimum 25·5 inches in 1864–65. The total number of deaths recorded in 1883 was 27,012, or 25 per thousand;

the average death-rate for the previous five years was returned at 28·94 per thousand; but these figures cannot be implicitly accepted. Six Government charitable dispensaries — at Mírzápur, Narghát, Dúdhí, Korh, Robertsganj, and Chanár—afforded relief in 1883 to 56,791 persons, of whom 736 were in-patients. [For further information regarding Mírzápur, see the *Gazetteer of the North-Western Provinces*, vol. xiv. part ii. pp. 1–229 (Allahábád Government Press, 1883); the *Census Report of the North-Western Provinces and Oudh* for 1881; and the several Administration and Departmental Reports from 1880 to 1884.]

Mírzápur.—Western *tahsíl* of Mírzápur District, North-Western Provinces; stretching on either side of the river Ganges, and extending southward as far as the Vindhyan range, comprising *parganás* Upraudh, Chaurási, Chhiánaví, and Kon, and *táluk* Majhwa, the three first named being to the south, and the two last to the north of the Ganges. The total area, according to the latest official statement, was 1166·7 square miles. The area assessed for Government revenue is 1156·9 square miles, of which 534·1 square miles are cultivated, 145·9 square miles are cultivable but under tillage, and 476·9 square miles are uncultivable waste. Population (1872) 361,548; (1881) 377,346, namely, males 186,154, and females 191,192; total increase since 1872, 15,798, or 4·2 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 352,100; Muhammadans, 24,793; Jains, 187; and 'others,' 266. Number of villages, 1056, of which 875 contained less than five hundred inhabitants. Amount of Government land revenue, £32,623, or including local rates and cesses, £35,489. Total amount of rent, including cesses, paid by the cultivators, £84,481. The *tahsíl* contained in 1883, 7 criminal and 5 civil courts; number of police circles, 16; with a regular police force of 221 men, and a village police of 773 *chaukídárs*.

Mírzápur.—City, municipality, and administrative head-quarters of Mírzápur District, North-Western Provinces. Situated in lat. 25° 9′ 43″ N., and long. 82° 38′ 10″ E., on the south or right bank of the Ganges, 56 miles below Allahábád, and 45 miles (by railway) above Benares. Population (1872) 67,274; (1881) 56,378, namely, males 27,607, and females 28,771. Hindus number 46,194; Muhammadans, 10,017; Jains, 140; Christians, 10; 'others,' 17. Area of town site, 673 acres.

Up to recent years, Mírzápur was the largest mart in Hindustán for grain and cotton; but of late its commercial importance has rapidly decreased, owing to the establishment of through railway communication with Bombay *viâ* Jabalpur, and the rise of Cawnpur to the position of a mercantile centre. The town has a handsome river front, lined with stone *gháts* or flights of stairs, and exhibiting numerous mosques, Hindu temples, and dwelling-houses of the wealthier mer-

chants, with highly decorated façades, and richly carved balconies and door-frames. Large wells, of tasteful architecture, occur in the principal streets. The suburbs contain the residences of the wealthier classes. The view from below, looking up the river along its lofty and rugged bank, crowned in the distance by the city with its great mosque and temples, is very striking.

The civil station stretches along a single road to the north-east of the city, parallel with the river. In addition to the houses of the official and private European residents, there are the church, schools, and orphanage of the London Mission; the public offices, station church, etc. Beyond the civil station were once the cantonments, but of these no vestige remains but the parade ground (now utilized as a race-course, rifle range, and camping ground), and one or two of the old military bungalows, now occupied by civil residents. No regiment has been stationed at Mírzápur since the Mutiny, the military element being represented by only a small detachment of volunteers. Manufacture of shell-lac, giving employment to about 4000 persons; also of brass-ware and carpets, and a large trade in stone. Imports of grain, sugar, cloth, metals, fruit, spices, tobacco, lac, salt, and cotton; exports of the same articles, with manufactured lac-dye, shell-lac, and *ghí*. Station on East Indian Railway. Government offices, District jail, hospital, charitable dispensary, etc. Municipal revenue in 1883–84, £6997; from taxes, £5540, or 1s. 3½d. per head of city and suburban population (85,362) within municipal limits.

Mishmí Hills and Tribe.—Tract of country on the eastern frontier of Assam, and extending to the confines of Tibet, occupied by the hill tribe known as Mishmís. Their settlements are estimated to extend from 27° 40′ to 28° 40′ N. lat., and from 96° to 97° 30′ E. long. They are found as far south as the Nemlang river, a tributary of the Irawadi; thence their colonies sweep round to the east of the great mountain called the Dapha Bhúm, across the Brahmaputra valley, north to the confines of Tibet, and west to the Dihong river. Colonel Dalton conjectures that the Mishmís are connected with the Mian-tze, the aborigines of Yunan in Western China. They are a short, sturdy race, with a fair complexion and features of a softened Mongolian type. Their dress is made of striped cloth; their armour consists of helmet, sword, and spear; and the women wear ornaments of beads and silver. They are devoted to a pastoral life rather than to agriculture, and are all keen traders. The Mishmís, situated to the west of the Du river, an affluent of the Brahmaputra above the Brahmakund, trade with the British possessions, and are quiet and inoffensive, and in the habit of constant intercourse with British officers at the frontier stations. Those beyond the Du river trade with Tibet, and have hitherto shown themselves hostile to the visits of British officers, until quite recently, when

in 1885 a party of three English gentlemen passed through the Mishmí country, and were hospitably received. The Mishmís are divided into many clans, of which that called Táin is settled nearest to the British frontier.

The more remote clans of the interior were first visited by Captain Wilcox in 1827, who, however, was forced to return after having penetrated a short distance into the country. In 1836, the friendly villages as far as the Dilli were visited by Dr. Griffiths. Lieutenant, afterwards Colonel, E. A. Rowlatt, penetrated in 1845 to the Du, and up that river in a northerly direction to the village of Tapang, where he met some Lamas, as all Tibetans in this locality are called.

In 1851, the French missionary, Monsieur Krick, accompanied by a Khamtí chief from the neighbourhood of Sadiyá, started on his mission to Tibet. After passing through the friendly villages, he appears to have been so guided as to avoid the hostile clans, and he reached in safety the Tibetan village of Oualong, where he was well received. Proceeding onward from that village, he found himself in a country presenting a strong contrast to the grand but uncultivated tracts he had recently been struggling through. The valley of the Brahmaputra expanded, presenting a succession of well-cultivated fields. The inhabitants, their houses, and the general appearance of the country assumed a more cheerful aspect. Pine forests covered the hills. The alluvial soil below, watered by numerous small streams, is described as producing groves of bamboos, orange trees, citron, peach trees, and laurel. Two marches through such scenery brought him to Sommeu. This village is composed of about a dozen houses irregularly grouped on a hill in the midst of evergreen trees, half a mile from the bank of the Brahmaputra. As far as the eye could see, the view up the valley disclosed a succession of cultivated fields, herds of oxen, horses, asses, and mules; and three miles to the north, Rima, the residence of a Tibetan Governor, was discovered.

Unfortunately, Monsieur Krick's resources were exhausted in making his way through the Mishmí country; and finding the people, when the novelty was over, disinclined to support him gratuitously, he was under the necessity of returning in March 1852. In 1854, Monsieur Krick started on a second expedition, accompanied by a colleague and escorted by a friendly Mishmí chief, and reached in safety the Tibetan villages he visited in 1852; but in crossing the mountains the two priests were treacherously murdered by an independent Mishmí chief, Kaisá. A small military expedition sent to avenge their fate in 1855, captured the chief with many members of his family and followers; since which time the interior Mishmí country remained unvisited by Europeans until 1885. In that year a party of three English gentlemen succeeded in crossing the Mishmí country, where they met with a

friendly reception. They advanced into Tibetan territory as far as the town of Rima mentioned above. They did not succeed in entering the town however, but were, with many excuses and apologies, civilly escorted back over the frontier.

The Mishmí settlements south of the Brahmaputra are scattered and mixed up with Khamtí and Singhpo settlements. The north bank of the Brahmaputra as far as the Digáru river, and both banks of the river thence to the Tibetan frontier, the Mishmís have all to themselves. The Mishmí hamlets consist of a few houses, sometimes of only one; but each house is capable of holding all the members of a family, besides numerous slaves and retainers. Dr. Griffiths describes the house of Gallom Gám, one of the chiefs he visited, as of great length (Wilcox gives the dimensions as 130 feet by 11), built of bamboos raised high from the ground, divided into twelve compartments, and containing one hundred men, women, and children. The house of Krosha, another chief, is described as considerably larger, and divided into twenty compartments. On the right-hand side of the passage were ranged the skulls of the cattle the chief had killed, including *mithuns* (Bos frontalis), deer, and hog. On the other side were the domestic utensils. It is considered shabby for a chief to retain in his show-room the skulls of animals killed by his predecessors. Each compartment contains a fireplace, over which hangs a tray for the meat that it is desired to smoke. This one manor-house is the head-quarters of the settlement. The storehouses for grain are at some distance and out of sight.

The Mishmís are constantly moving about on their trading expeditions, and are rich in flocks and herds. They purchase cattle every year in Assam, and have, besides, large herds of the fine hill ox, the *mithun*, which they call *cha*. The possession of these animals is, next to the number of their wives, the chief indication of their wealth. They are not used for agricultural purposes or for their milk, but on great occasions one is slaughtered and eaten, and they are given in exchange for brides. They are allowed to remain almost in a wild state, roving through the forests as they please, but they are fed with salt by their master; and when he calls, they know his voice. The chief sources of wealth to the Mishmís are the poisonous root, Aconitum ferox, which grows in their hills at high elevations; the valuable medicinal plant, Coptis teeta or *mishmí titá*; and the musk bags of the musk deer, also a native of these hills in the higher ranges. With these, and a few articles of hardware and woollen goods obtained from Tibet, they carry on a profitable trade with the people of Assam and the neighbouring hill tribes. Everything that a Mishmí trader carries about him, to his last garment, can be bought.

The Chalikátá, or crop-haired Mishmís, so called by the Assamese

from their habit of cropping the front hair on their foreheads, but whose proper tribal name is Midhi, occupy the country to the north of Sadiyá in Lakhimpur District, and their villages extend across the sub-Himálayan range to the borders of Tibet. The hills being loftier, their country is more rugged and difficult of access than that of the Táin Mishmís. One route to the plains traversed by the Chalikátás is along the cliffs of the Dibong river, the path being generally a narrow ledge winding round a precipice ; but in one place there is no ledge, only holes in the face of the rock for the hands and feet. The Chalikátá Mishmís were formerly much dreaded by their neighbours in the plains as kid-nappers of women and children ; but they have lately been brought into closer connection with the British, by their fear of the Abars and their desire to cultivate friendly relations which may avail to protect them. Some of their outlying villages have recently been visited by our officers. The Digáru Mishmís farther east are a more attractive people in manner. They are the guardians of the shrine of Brahma-kund, and carry loads for the pilgrims proceeding thither.

Misrikh.—*Parganá* in Sítápur District, Oudh. Bounded on the north by Maholí ; on the east by Sítápur, Rámkot, and Machhrehta ; on the south by Kurauna and Aurangábád *parganás ;* and on the west by the Kurauna and Gúmtí rivers. Area, 126 square miles, or 81,153 acres, of which 40,754 acres are under cultivation, 26,921 acres cultivable, 3696 acres rent free, and 9782 acres barren. Misrikh contains 142 demarcated villages, of which 3 are waste land grants. Population (1881) 41,561, namely, males 22,167, and females 19,394.

With the exception of a sandy tract along the banks of the Kurauna and Gúmtí rivers, the soil of the *parganá* is, on the whole, good. Like the rest of the District, it is a well-wooded plain, without lakes, hills, or forests. The incidence of the Government land revenue demand is at the rate of 3s. $2\frac{3}{8}$d. per acre of cultivated area, 1s. $11\frac{1}{8}$d. per acre of assessed area, and 1s. $8\frac{1}{8}$d. per acre of total area. Means of communication are afforded by two roads which intersect the *parganá*, and by the Gúmtí river. Bi-weekly markets in 3 villages. Misrikh contains 139 Government villages, of which 108 are held under *zamíndárí* tenure, thus distributed:—Panwárs, 35 ; Gaurs, 45 ; Káyasths, 10 ; Bráhmans, 6 ; Gosáins, 3 ; Musalmáns, 8 ; and Ahban, 1. The remaining 31 villages form the *tálukdárí* estates of Mírzá Ahmad Beg of Kutabnagar and Rájá Shamsher Bahádur of Aút.

The *parganá* derives its name from the town (*vide infra*). The original proprietors were Ahban Rájputs, whose dynasty expired 200 years ago, on the death of Rájá Mán Singh. The founder of the estate was Sopí Chand, whose brother, Gopí Chand, founded Gopámau in Hardoi District. Sopí made his head-quarters at Pataunja, now an inconsider-

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Misrikh.—*Parganá* in Sítápur District, Oudh. Bounded on the north by Maholí; on the east by Sítápur, Rámkot, and Machhrehta; on the south by Kurauna and Aurangábád *parganás;* and on the west by the Kurauna and Gúmtí rivers. Area, 126 square miles, or 81,153 acres, of which 40,754 acres are under cultivation, 26,921 acres cultivable, 3696 acres rent free, and 9782 acres barren. Misrikh contains 142 demarcated villages, of which 3 are waste land grants. Population (1881) 41,561, namely, males 22,167, and females 19,394.

With the exception of a sandy tract along the banks of the Kurauna and Gúmtí rivers, the soil of the *parganá* is, on the whole, good. Like the rest of the District, it is a well-wooded plain, without lakes, hills, or forests. The incidence of the Government land revenue demand is at the rate of 3s. 2⅝d. per acre of cultivated area, 1s. 11⅛d. per acre of assessed area, and 1s. 8⅛d. per acre of total area. Means of communication are afforded by two roads which intersect the *parganá*, and by the Gúmtí river. Bi-weekly markets in 3 villages. Misrikh contains 139 Government villages, of which 108 are held under *zamíndárí* tenure, thus distributed:—Panwárs, 35; Gaurs, 45; Káyasths, 10; Bráhmans, 6; Gosáins, 3; Musalmáns, 8; and Ahban, 1. The remaining 31 villages form the *tálukdárí* estates of Mírzá Ahmad Beg of Kutabnagar and Rájá Shamsher Bahádur of Aút.

The *parganá* derives its name from the town (*vide infra*). The original proprietors were Ahban Rájputs, whose dynasty expired 200 years ago, on the death of Rájá Mán Singh. The founder of the estate was Sopí Chand, whose brother, Gopí Chand, founded Gopámau in Hardoi District. Sopí made his head-quarters at Pataunja, now an inconsider-

able village, but formerly an extensive city. At present, the site of one of its gates is pointed out 3 miles to the north-west of Misrikh town, in the village of Sultán-nagar, where is an ancient Hindu temple. The Ahbans were succeeded by Panwárs, Káyasths, Bráhmans, Musalmáns, and others, whose descendants are still in possession of their forefathers' acquisitions.

Misrikh.—*Tahsíl* or Sub-division in Sítápur District, Oudh; situated between 27° 12′ and 27° 48′ 30″ N. lat., and between 80° 21′ and 80° 52′ E. long. Bounded on the north by Muhamdi *tahsíl* in Kheri District; on the east by Sítápur and Bári *tahsíls*; and on the south and west by Sandíla and Hardoi *tahsíls* in Hardoi District, from which it is separated by the Gúmtí river. The *tahsíl* comprises the 7 *parganás* of Misrikh, Chandra, Mahúli, Machhreta, Kurauna, Aurangábád, and Gundlámau. Area, 613 square miles, of which 385 were under cultivation at the time of the last revenue settlement of the District (1872). Population (1869) 201,367; (1881) 213,671, namely, males 113,710, and females 99,961; total increase since 1869, 12,304, or 5·7 per cent. in twelve years. Classified according to religion, there were in 1881—Hindus, 196,552; Muhammadans, 17,108; Jains, 4; and 'others,' 7. Number of villages, 638, of which 508 contained less than five hundred inhabitants. In 1883, Misrikh *tahsíl* contained 1 civil and 2 criminal courts, presided over by an honorary Assistant Commissioner, and a *tahsíldár*; number of police circles (*thánás*), 2; regular police force, 57 men; village watch (*chaukídárs*), 751.

Misrikh.—Town in Sítápur District, Oudh, and head-quarters of Misrikh *tahsíl* and *parganá*; situated 13 miles south of Sítápur town, on the Hardoi and Sítápur road. Lat. 27° 25′ 50″ N., long. 80° 34′ 20″ E. One of the most ancient towns in Oudh, and numerous legends connect its foundation with the mythological Rájá Dadhích. The name is said to be derived from the Sanskrit *misrita*, meaning 'mixed'; because the waters of all the holy places in India are supposed to have been brought together and mixed in the tank mentioned below.

The legend is thus given by Colonel Sleeman:—'Misrikh is celebrated as the residence of a very holy sage named Dadhích. In a great battle between the *deotas* and the giants, the *deotas* were defeated. They went to implore the aid of the god Brahma upon his snowy mountain-top. He told them to go to Misrikh, and arm themselves with the bones of the old sage Dadhích. They found the sage alive, and in excellent health; but they thought it their duty to explain to him their orders. He told them that he should be proud to have his bones used as arms in so holy a cause; but he had unfortunately vowed to bathe at all the sacred shrines in India before he died, and must perform his vow. Grievously perplexed, the *deotas* all went and submitted their case to their leader, the god Indra. Indra consulted his chaplain, Brispati,

Mohan.—Town in Unao District, Oudh, and head-quarters of Unao *tahsíl;* situated in lat. 26° 46′ 55″ N., and long. 80° 43′ E., on the banks of the Sai river, 18 miles from Lucknow city, with which it is connected by a good unmetalled road. A Muhammadan town of considerable importance in the days of native rule, but it has now no trade, and not even a market is held here. Population (1881) 5858, namely, 3754 Hindus and 2104 Muhammadans. The town consists of 1117 houses, and contains one or two streets well paved with brick. Many of the Musalmán inhabitants belong to good families, who, under the native Government, found service in Lucknow city or at court, but who now live on the produce of their groves. Mohan has always been celebrated for its Muhammadan physicians, and mimics and actors. In addition to the Lucknow road, the town is intersected by the road from Aurás and Malihábád to Bani bridge on the Lucknow and Cawnpur road, and by others running westwards across the Sai into Unao. A little below the town, the Sai is crossed by a fine massive bridge, built by Mahárájá Newal Rái, the minister of the Nawáb Safdar Jang. Near the bridge is a high mound, which seems to have been the site of an ancient fort, now surmounted by an old tomb of a Muhammadan saint.

Mohan.—River of Oudh, forming for some distance the boundary line between Kheri District and Nepál. It commences as a rivulet in Nepál territory, issuing from swamps, with a bed much below the surface of the neighbouring country. It receives a number of tributaries on its north bank, the principal being the Kathni and Gandhra. Below Chandan Chaukí, the Mohan becomes a considerable stream, with a minimum discharge of 140 cubic feet of water per second; average breadth about 90 feet, with a depth in the centre of about 2 feet; the banks are steep, and from 20 to 30 feet above the water. The river falls into the KAURIALA immediately above Rámnagar, in Kheri District. The Mohan is one of the few streams in Oudh in which good *mahsír* fishing is to be had.

Mohan Aurás.—*Parganá* in Unao District, Oudh; bounded on

Moghia.—Aboriginal tribe in Rájputána and Central India. For an account of this tribe, and of the operations which are now going on with a view to its amelioration, see article RAJPUTANA. Until the date of these operations, the Moghias were one of the most persistently predatory tribes in Central India.

úsar or saline plains, completely bare of trees and of all vegetation; but to the south, the *parganá* is cultivated and fertile. Area, 196 square miles, of which 102 are cultivated. Population (1881) 99,359, namely, 91,171 Hindus and 8188 Muhammadans. The Government land revenue is levied at the rate of 4s. 1½d. per cultivated acre, 3s. per acre of assessed area, and 2s. 1½d. per acre of total area. The

parganá is well supplied with road communication, and contains 4 towns with a population exceeding 3000.

Mohand.—Pass in Dehrá Dún District, North-Western Provinces, through the Siwálik range, by which the road from Sahāranpur to Dehrá traverses the hills.

Mohanganj.—*Parganá* in Digbijaiganj *tahsíl*, Rái Bareli District, Oudh; bounded on the north by Símrauta and Jagdíspur, on the east by Gaura Jamún, on the south by Rokha Jáis, and on the west by Hardoi *parganá*. Area, 79½ square miles, or 50,898 acres, of which 24,636 acres are cultivated, 5925 available for cultivation, and 20,334 waste. Population (1881) 47,652, namely, 42,672 Hindus and 4980 Muhammadans. Land revenue demand, £9281, being at the rate of 3s. 2¾d. per acre. Of the 75 villages comprising the *parganá*, 47 are held under *tálukdárí*, 4 under *zamíndárí*, and 24 under *pattidárí* tenure. The landholding class are the Kanhpuria Rájputs, who made some of their earliest settlements in this *parganá*. They hold all the *tálukdárí*, and all but 8 of the *zamíndárí* villages.

Mohanlálganj.—*Tahsíl* or Sub-division of Lucknow District, Oudh; bounded on the north by Lucknow and Bara Banki *tahsíls*, on the east by Haidargarh, on the south by Mahárájganj, and on the west by Púrwa. Area, 272 square miles, of which 147 are cultivated. Population (1869) 150,854; (1881) 129,209, namely, males 65,893, and females 63,316. Decrease of population since 1869, 21,645, or 14·3 per cent. in twelve years. Classified according to religion, there were in 1881—Hindus, 117,014; Muhammadans, 12,180; and 'others,' 15. Average density of population, 475 persons per square mile; number of villages, 226, of which 140 contain less than five hundred inhabitants. This *tahsíl* comprises the 2 *parganás* of Mohanlálganj and Nigohán Sissaindi. In 1884 the Sub-division contained 1 *tahsíldár's* court, 2 police circles (*thánás*), a regular police force of 48 men, and a village police of 464 *chaukídárs*.

Mohanlálganj.—*Parganá* in Lucknow District, Oudh. Bounded on the north by Bara Banki District, from which it is separated by the Gúmtí river; on the east by Haidargarh *parganá* of Bara Banki District; on the south by Nigohán *parganá*; and on the west by Bijnaur and Lucknow *parganás*. A compact, square-shaped *parganá*, with an area of 200 square miles, of which 107 are cultivated. The large quantity of waste land (46 per cent.) is due to extensive saliferous plains, which cross the centre of the *parganá* from east to west. In other respects the country is fertile and well wooded. Its *jhíls* or marshes, with seasonable rains, afford an ample supply of water. The proportion of irrigation amounts to 45 per cent. of the cultivated land, and water is everywhere found within 20 feet of the surface. All the principal cereals are grown, as also sugar-cane and poppy, and vegetables in the

neighbourhood of villages. The rice crops grown on the margin of the *jhíls* near Nagrám are specially fine. Population (1881) 96,878, namely, 49,406 males and 47,472 females. Government land revenue demand, £17,380, being at the rate of 5s. per cultivated acre, 3s. 4½d. per acre of assessed area, and 2s. 7½d. per acre of total area. Five towns contain between 2000 and 5000, and one, AMETHI, has over 5000 inhabitants.

The *parganá* is unanimously asserted to have been originally held by the aboriginal Bhars; and the country abounds in old Bhar *díhs*, which appear to be the sites of their villages and forts. These are sometimes of great elevation and extent. They are quite deserted, and the only signs of ancient habitations are the broken bricks which lie scattered over the mounds, and sometimes a hut on the summit devoted to some deified hero, who is worshipped under the title of Bír. There are no fewer than twenty of these Bhar *díhs* in the *parganá*. The Bhars are said to have ruled from Bahráich, and Amethi was one of their outposts. Popular tradition asserts that the Hindu monarch of Kanauj in vain tried to wrest the country from them. The Muhammadan invasion of Sayyid Sálár Masáúd (1032 A.D.) failed to make any permanent conquest, and it was not till the end of the 14th century that the Bhars were driven out by the Amethi Rájputs of the Chamár-Gaur tribe. These in turn were expelled about the close of the 15th the Mohmand population to join their kindred of the Pesháwar whole *parganá*. The village of Sálimpur, in the north of the *parganá*, was founded by this family; and the present *tálukdár* who holds the estate of Sálimpur is descended from it. Of the 271 villages now comprising the *parganá*, 120 are in the hands of Musalmáns, and 151 belong to Hindus. The principal Hindu landed proprietors are Janwár Rájputs.

Mohanlálganj.—Town in Lucknow District, Oudh, and head-quarters of Mohanlálganj *tahsíl* and *parganá*; situated on the Lucknow and Rái Bareli road, 14 miles from Lucknow city, in lat. 26° 40′ 45″ N., and long. 81° 1′ 30″ E. The village itself was formerly called Mau, and was founded by Janwár Rájputs, who held undisputed possession of this and neighbouring villages undisturbed during the rule of the Nawábs. It was eventually conferred on the present *tálukdár*, Rájá Kási Prasád, who in 1859 built a *ganj* or market, which he named Mohanlálganj after an ancestor. This name has now been given to the *parganá*, which was formerly called Amethi, and to the whole *tahsíl*. The *ganj* is now a thriving centre of traffic, and a large trade is carried on, chiefly in grain and country cotton stuffs. Population (1881) 2781, almost entirely Hindus. Inside the *ganj* is a fine *sarái* or travellers' rest-house, and outside are the *tahsíli* buildings, police station, and a military camping ground. Large and imposing Sivaite temple, erected by the *tálukdár*. Two Government schools.

Mohanpur. — Native State under the Political Agency of Mahi Kántha, in the Province of Gujarát, Bombay Presidency. Population (1872) 14,011; (1881) 14,677. The principal agricultural products are millet, wheat, maize, and oil-seeds. Talc is found in Arpodra. The Chief is descended from the Ráos of Chandrawati, near Mount Abu. His ancestor, Jaspál, emigrated from Chandrawati to Hárol in Mahi Kántha in 1227; and thence, in the 13th generation, Thákur Prithwi Ráj moved to Ghorwára, having received in *jágír* that and neighbouring tracts, which in the course of time were divided among the different branches of the family. The present ruler, Thákur Himat Singh, a Rehwar Rájput, succeeded his father Umed Singh, who died in October 1882. He is a Hindu of the ancient Rájput clan called Pramara; and being a minor, the State is managed by the Agency. He enjoys an estimated gross yearly revenue of £2429, and pays tribute of £475 to the Gáekwár of Baroda, £225 to the Rájá of Edar, and 15s. to the British Government. The family of the Chief follow the rule of primogeniture in matters of succession. There are 4 schools, with a total number of 187 pupils.

Mohanpur.—Chief town of the State of Mohanpur under the Mahi Kántha Political Agency, Bombay Presidency. Population (1881) 1051.

ation (1869) 150,854; (1881) 129,209, namely, males 65,8[illegible]3, and

Moharbhanj. — One of the Orissa Tributary Hill States. — *See* MORBHANJ.

Mohárí.—Town and municipality in Bhandárá District, Central Provinces; situated in lat. 21° 19′ N., and long. 79° 42′ E., on the affluent of the Súr river, 10 miles north of Bhandárá. Population (1881) 5142, namely, Hindus, 4601; Kabírpanthís, 69; Muhammadans, 411; Jains, 10; aboriginal tribes, 51. Municipal income (1882–83), £285; average incidence of taxation, 1s. $0\frac{1}{4}$d. per head. Mohárí is reckoned healthy, though the well-water is scanty and brackish. The cotton cloth manufactured in the town commands a good sale, although the trade shows signs of falling off; and some trade is done in grain. Large Government school, police office, and District post-office.

Mohgáon. — Town in Chhindwárá District, Central Provinces; situated in lat. 21° 38′ N., and long. 78° E., on an affluent of the Jám river, 38 miles south of Chhindwárá town. On either side of the river stands a large Hindu temple, one of which, sacred to Mahádeva, is said to be three centuries old. Population (1881) 5180, many of whom are traders. Hindus numbered 3845; Kabírpanthís, 945; Muhammadans, 651; Jains, 122; aboriginal tribes, 67. Municipal income (1882–83), £76, 12s.; average incidence of taxation, 3d. per head. The town contains a vernacular school, with an average attendance of over 80 pupils; and a police outpost station.

Mohi.—Town in Unao District, Oudh; 15 miles south-east from Púrwa. Lat. 26° 26′ N., long. 81° 2′ E. Population (1869) 4995, namely, 4802 Hindus and 193 Musalmáns, residing in 946 mud houses. Not returned in the Census of 1881. Founded about 500 years ago by a Rájput, Mán Singh. Two temples; village school.

MOTUR. (2) town in Thána District, Bombay.—See MAHIM.

Mohmands, The.—Independent tribe in Afghánistán. The tribe inhabits the network of hills between the Kábul and Swát rivers, connecting the Safed Koh with the Hindu Kúsh. The Mohmand country is bounded on the north by the hills of Bajaur; on the north-east and east by British territory; and on the west and south by the Kunár and Kábul rivers. The settlements of the tribe divide naturally into two parts—those that lie along the rich alluvial banks of the Kábul river, extending from Jalálábád to Lálpura; and those that nestle in the glens and valleys radiating from the mountains of Tartara south of the Kábul and the mountains of Hazáin north of the Kábul river. The aspect of the Mohmand hills is exceedingly dreary. The eye is everywhere met by barren ravines and long rows of crags. Want of water, intolerable heat in summer, and a general sterility that characterizes the whole region, are gradually driving this portion of the Mohmand population to join their kindred of the Pesháwar District in the plains below.

History.—The Mohmands, originally related to the Yusafzais about Kábul and Ghazni, settled in their present country between the 13th and 15th centuries. Almost from the beginning, a feud has been kept alive between the Mohmands and their neighbours the Shinwárís. In one battle was lost the Mohmand fetish, an enormous kettle-drum, captured from Aurangzeb, and never beaten unless in the most critical circumstances, when its notes are said to resound through Shinwárí territory to the terror of its inhabitants. The Mohmands rose against the English after the disasters at Kábul in 1841. In 1851, and again in 1854, it was found necessary to level the villages of the Michni

Irrigation is necessary throughout the section lying on the south of the Ganges, in order to secure the harvest, and is generally resorted to by the cultivators after their simple and inexpensive methods.

The minerals found in Monghyr District are almost entirely confined to the tract lying south of the Ganges. The more important are the

Mohmands were arrayed against the British.

Population.—There are no Mohmand towns. A large Mohmand village contains from 1500 to 3000 people. The largest villages are Lálpura, Sangar Sarai, and Yakhdond. The main divisions of the tribe are the Tarakzai, the Halimzai, the Baizai, and the Khwazai. Private blood-feuds are common. The long-standing custom of periodi-

cally distributing tribal lands has ceased of late years. The Mohmand tribesman is characteristically haughty and insolent. Travellers have attributed to him treachery, cruelty, and cowardice. An infamous traffic in kidnapped women is also said to exist.

Trade, etc.—The through trade of the Mohmand country is considerable. Through the emigrated from Chandrawati to Hárol in Mani Chitral, Kunár, and Laghman on the Kábul, and from Dir and Swát on the Swát river; wax, hides, *ghí*, and rice, from Kunár; iron from Bajaur in lumps and bars—good ore, but badly smelted; gold-dust, hawks, and falcons from Káfiristán and Chitral. The Mohmand exports are firewood, grass, charcoal, ropes, fine mats, honey, and cattle. Chief imports—salt, cloth, tea, indigo, and miscellaneous articles of European manufacture. By means of the transit dues and the small sums earned as carriers to and from Pesháwar, Jalálábád, Pesh Bolak, Lálpura, and Sháhkadar, the inhabitants eke out a subsistence. The opening of the Khaibar (Khyber) Pass to traffic has minimized the importance of the Dacca-Pesháwar route through Mohmand territory. The transit duties levied by the local Kháns vary from 8s. to £4, according to the kind of merchandise and carriage.

Administration.—The Khán of Lálpura is the chief of most consideration among the Mohmands. His total annual income varies from £10,000 to £12,000. The government of the Amír at Kábul is suzerain to the Mohmand tribes; but except in military matters, or during the continuance of a war, the tribal administration is an unrestricted following of local custom.

Mohnár.—Town in Muzaffarpur District, Bengal; situated 20 miles south-east of Hájípur, a short distance north of the Ganges, on the Hájípur and Mahí-ud-dín-nagar road. Population (1881) 7447, namely, Hindus, 6222, and Muhammadans, 1225. Municipal income (1883–84), £126; average incidence of taxation, 4d. per head of the population. Police outpost station, and a distillery under the jurisdiction of the sub-divisional officer at Hájípur. Large *bázár*, with trade in linseed, food-grains, and saltpetre. Two *pathsálás* or indigenous schools.

Mohgáon. — Town in Chhindwárá District, Central Provinces; situated in lat. 21° 38′ N., and long. 78° E., on an affluent of the Jám river, 38 miles south of Chhindwárá town. On either side of the river stands a large Hindu temple, one of which, sacred to Mahádeva, is

Mohpá (*Muhpa*). — Town in Nágpur District, Central Provinces; situated in lat. 21° 19′ N., and long. 78° 52′ E., on the river Chandrabhágá, 20 miles from Nágpur city. Population (1881) 5515, chiefly agricultural. Hindus numbered 5256; Muhammadans, 257; and aboriginal tribes, 2. The Málí caste are numerous, and by their industry most of the rich land is cultivated and irrigated like a garden.

Mohpá is the chief place in a small but valuable estate belonging to the Nawáb Hasan Alí Khán. The new road through Kalmeswar to Sáwargáon will pass through the town. A good school-house has lately been built.

Mohtúr.—Plateau in Chhindwárá District, Central Provinces.—*See* MOTUR.

ant article of export to Calcutta. The charge levied by the landowners is about 8 *ánnás* (1s.) per head for the season from June to January.

Baroda.

To the south of the Ganges, the country is dry, much less fertile, and broken up by fragmentary ridges. The soil consists of quartz, mixed in varying proportions with mica. Ranges of hills intersect this part of the District, and in the extreme south form conical peaks, densely covered with jungle, but of no great height. The principal are the Kharakpur hills, which form a distinct watershed, the Keul river draining the western, and the Mán the eastern portion of the range, both rivers falling into the Ganges.

The Ganges itself intersects the District from west to east for 70 miles. It is navigable at all seasons by river steamers and the largest native boats. The Little Gandak, Tíljuga, and Keul are also navigable all the year round. The other water communications are a number of *kháls* or connecting channels, mainly in the north of the District, which are only navigable in the rains. By keeping to them, boats of twenty tons burthen can get within a short distance of the great inundated tract extending from Tilkeswar to the eastern boundary of the District, about 32 miles in length, by about 14 miles in width. The most important of these are the Khargaria, Bághmatí, and Chándá *kháls*. Changes in the river courses have been almost confined to the Ganges, the main channel of which has several times shifted to the north or south of several islands that lie in the bed of the river west of Monghyr town. At present it passes directly under the fort, and a great piece of land called the Bindá *diárá*, with an area of 22 square miles, has been formed in the south of *parganá* Pharkiyá. The changes in the Little Gandak and Tíljuga have been unimportant. Irrigation is necessary throughout the section lying on the south of the Ganges, in order to secure the harvest, and is generally resorted to by the cultivators after their simple and inexpensive methods.

The minerals found in Monghyr District are almost entirely confined to the tract lying south of the Ganges. The more important are the following:—Galena, a sulphuret of lead, containing a small quantity of silver, found in the hill tracts of *parganá* Chakái. Minium or protoxide of lead is found in the bed of the Kharakpur hill streams. A rich iron-

Mokher.—Town in Chindwárá *tahsíl*, Chindwárá District, Central Provinces. Population (1881) 2240, namely, Hindus, 1661; Muhammadans, 456; Jains, 104; Kabírpanthís, 2; and aboriginal tribes, 17.

alumina, silica, and a trace of alkali; found principally in the Kharakpur hills. The percentage of pure iron oxide is about 60 per cent. It would be valuable for smelting purposes, if limestone as a flux, and coal or other fuel, were cheap. As it is, however, it is only used as a cheap pigment for painting. Felspar fit for the manufacture of porcelain is met with in great abundance in the south of the District. Corundum is obtained from the hills near Jamuí, but the precious forms are not met with. Travertine is found near Gidhaur, and in the Kharakpur hills. *Kankar* or nodular limestone, principally used for metalling the roads, is found more or less in all parts of the District, mostly in the older tertiary formations of alluvial origin. There are also stone and slate quarries in the District.

The forest tracts of Monghyr District are estimated to cover an area of 427 square miles, mostly in the south, and in the Kharakpur estate of the Mahárájá of Darbhangah. Owing, however, to the absence of any system of forest conservancy, all large timber has long since disappeared. The principal trees are—the *sál*, locally known as the *sákna* (Shorea robusta); *abnús*, or ebony (Diospyros Melanoxylon); *tún* (Cedrela Toona); *sitsál*, or black-wood (Dalbergia latifolia); *kantal* (Artocarpus integrifolia); *bij-sál* (Pterocarpus Marsupium); *sissú* (Dalbergia sissoo); *ám*, or mango (Mangifera indica); *mahuá* (Bassia latifolia); *bat*, or banyan (Ficus bengalensis); *pípal* (Ficus religiosa); *pákur* (Ficus infectoria); *badám* (Terminalia Catappa); *somi* (Prosopis spicigera); *sonálu* (Cassia Fistula); *gáb* (Diospyros embryopteris); *kadam* (Anthocephalus Cadamba); *tetul* (Tamarindus indica); *símul* (Bombax malabaricum); *hara* (Terminalia Chebula); *pansaura* (Grewia multiflora).

Of jungle products, the most important is the *mahuá*, the flower and fruit of the Bassia latifolia, both on account of the extent of country over which it grows, and for the value and usefulness of its products. It is found in large forests in the hilly country in the south of the District. Thousands of tons of the petals are collected annually by the jungle tribes; and when mixed with grain, form a cheap and nutritious article of food. Also, about 100,000 gallons of a strong spirit are annually distilled from the flowers, under Government supervision. The fruit yields a valuable oil, used in sweetmeats, for burning, and also for the adulteration of *ghí* exported to Calcutta. The wood is hard, and suitable for the naves of cart wheels. The bark is used medicinally as an astringent and tonic. Frankincense, obtained from the Boswellia floribunda, is gathered to some extent, as is also the gum called *gugal* from the Balsomodendron Mukul, and which is described as having a fragrance equal to that of the finest myrrh. The gum is difficult of collection, as it is very watery, and rapidly evaporates, leaving only a minute portion of gum, which is not tenacious or elastic like myrrh. A

gum called *dhuna*, much used as incense, is gathered from the *sál* tree. Gums are also obtained for ordinary purposes from many trees, but they generally contain a large percentage of earth and dirt. The myrabolan of commerce, the fruit of the Terminalia Chebula, is abundant in the forests, and makes a very good dye mixed with sulphate of iron or alum. Rope is made in large quantities from a jungle creeper, the Bauhinia Vahlii, and also from a coarse grass called *sabi*. Lac is collected to some extent for exportation, and for making bracelets, toys, etc. The insects are found on the small branches and petioles of the *palás* tree (Butea frondosa). This tree also affords a valuable gum, and its leaves a yellow dye of considerable permanence. Honey, though occasionally collected, does not appear to be a general article of trade.

Wild Animals.—Tigers are not common in Monghyr, as the Government reward for their destruction is sufficient inducement for Santál hunters to destroy them, which they do usually by means of traps set with bows and arrows in the paths which they frequent. The black bear is found generally throughout the hilly portion of the District, but is not common now. It is much sought after, both for the sake of the Government reward, and for the excellence of its flesh. The Santáls of the southern hills watch the animal as it comes to feed on the flowers of the *mahuá;* and, concealed in the branches of the tree, shoot it with poisoned arrows. Leopards, formerly numerous, are now being gradually exterminated. Hyænas are found in the hills, in caves which have been tenanted by them from time immemorial. Wild pigs are found sparingly all over the District; and wild buffaloes are occasionally met with in the north in *parganá* Pharkiyá. Of deer, the *sambhár* is occasionally killed. The spotted deer abounds towards the south, and often does serious injury to the crops. The swamp deer or *bará singhá* is not uncommon. Two species of monkeys are found in a few places, from which apparently they never migrate. The marshes in the north of the District form the home of myriads of geese and ducks during the cold season. The Gangetic porpoise or *susu* abounds in the river, and is occasionally captured and eaten, the oil being sold in the *bázár* for preserving leather and other purposes. Crocodiles abound in the north of the District, and many varieties of poisonous snakes are found.

The fisheries of the District are very extensive on the Ganges and Gandak rivers, with their tributaries, and are very valuable. The supply of fish is abundant at most seasons of the year, but diminishes at the time of high floods. The value of the Monghyr fisheries is estimated at about £100,000 a year. A considerable trade is carried on in shells of the fresh-water mussel and of the marsh snail. They are collected in tons in the Pharkiyá marshes, and on being burnt, yield a very pure lime, worth from £2 to £2, 10s. per ton.

The Modern History of Monghyr has been given in the account of BHAGALPUR DISTRICT, within which it was included in the earlier days of English administration. The local records do not give the date of the establishment of the District as a subsidiary executive centre, but this change appears to have been effected about the beginning of this century. In 1832, Monghyr was made an independent Deputy Collectorship and Joint Magistracy, and the title of Magistrate and Collector was subsequently given to the District officer. The magisterial and revenue jurisdiction of Monghyr is therefore now quite separate from Bhágalpur; but the civil and the higher criminal or assize jurisdiction is still vested in the Judge of Bhágalpur, who, once in two months, visits Monghyr to try serious cases and inspect the civil courts and jail.

The Earlier History of Monghyr has a special interest. It was one of the principal centres of the Muhammadan administration. The fort, of which an account is given in the article on the town of MONGHYR, is of great natural strength; and its value as a military position was recognised by Musalmán governors from the time of Muhammad Bakhtiyar Khiljí, in 1195 A.D., up to that of Mír Kásim in his conflicts with the English in the last century. According to the *Aín-í-Akbarí*, or Domesday Book of India, compiled by Todar Mall, the *sarkár* or Province of Monghyr was divided in 31 *mahál*s or fiscal divisions, paying an aggregate revenue of 109,625,981 *dáms*, 40 *dáms* being equal to 1 Akbarsháhí rupee. In addition, the *sarkár* was required to furnish 2150 horsemen and 50,000 foot. The *parganá* of Monghyr itself was assessed at 808,907½ *dáms*. The figures, however, were probably nominal, as the greater part of the country, especially to the south of the Ganges, was then in the hands of semi-independent chieftains.

The most powerful of these local chiefs was the Rájá of Kharakpur, who ruled over 24 *parganás*. The founder of this family was a Rájput soldier of fortune, who overthrew the original Kshetauri proprietors by an act of gross treachery. His son and successor strengthened his position by turning Muhammadan in the reign of the Emperor Jahángír, and taking a wife from the imperial *zanána*. The downfall of the line dates from the British occupation, when the ancestral estates were rapidly sold one after another for arrears of revenue, a large portion being bought by the Rájá of Darbhangah, who now allows a small pension to the representative of the original chief. Another ancient family is that of the Rájás of Pharkiyá, who trace their descent from a Rájput who first brought the lawless tribe of Dosádhs under subjection in the reign of the Emperor Humáyún, and received a grant of the *zamíndárí* in 1494. The property still continues in his family, but has been much broken up by sub-division

and alienation. At the present day, the principal landowner in the District is the Mahárájá Seoprasád Singh, son of the Mahárájá Sir Jai Mangal Singh, K.C.S.I., of Gidhaur, noted for his loyalty to the English, and the twenty-third in descent from the first occupant of the estate.

Population.—The first complete Census of the whole District was effected in 1872. The results disclosed a total population of 1,814,538 persons, dwelling in 2457 villages and in 328,174 houses, on an area corresponding to that of the present District, namely, 3921 square miles, the average pressure of population on the soil being 463 persons to the square mile. In 1881 the Census returned the population at 1,969,774, showing an increase of 155,236, or 8·55 per cent., in the nine years since 1872, an increase which, in the absence of immigration, represents the natural growth of the population by births over deaths. The most densely populated parts of the District are the immediate neighbourhood of Monghyr town and the tracts of country to the north of the Ganges. In these parts, the population varies from 536 per square mile in Surájgarha police circle, to 839 per square mile in the police circle of Monghyr. In the purely urban police circle of Jamálpur, with its 15 towns and villages on an area of 4 square miles, the average density is as high as 4956 per square mile. South of the Ganges, the police of Kharakpur, with 397 to the square mile, begins to show a marked diminution, which reaches its lowest point in the jungle and waste lands in the extreme south of the District, where the density is only 226 to the square mile in the police circles of Jamúi and Chakái.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 3921 square miles, with 4 towns, 6444 villages, and 289,847 houses, of which 280,234 were occupied and 9613 unoccupied. Total population, 1,969,774, namely, males 969,124, and females 1,000,650; proportion of males, 49·2 per cent. Average density, 502·37 persons per square mile; towns and villages per square mile, 1·64; persons per town or village, 305; houses per square mile, 73·93; inmates per occupied house, 7·03. Classified according to age, there were—under 15 years of age, boys 402,626, and girls 389,758; total children, 792,384, or 40·2 per cent. of the population: 15 years and upwards, males 566,498, and females 610,892; total adults, 1,177,390, or 59·8 per cent.

Religion.—The great majority of the people are Hindus by religion, that faith being professed by 1,774,013 persons, or 90·1 per cent.; Muhammadans number 187,517, or 9·5 per cent.; Christians, 1091; and Santáls and Kols, professing aboriginal religions, 7153; total, 1,969,774. In the above total are included 5186 'others,' who are returned as Hindus, making up the total aboriginal population to

12,339 in 1881, as against 21,672 returned in the Census of 1872. The semi-Hinduized aborigines, who inhabit the jungles in the southern parts of the District, were returned at 327,017 in 1872; but in the Census of 1881 they are not classified separately, and are included in the general Hindu population.

Among the high castes in 1881, Bráhmans numbered 57,291, and Rájputs 56,067. The Bábhans, another high caste, call for special notice. In the Begu Sarái Sub-division, to the north of the Ganges, they are twice as numerous as the whole Musalmán community, and form a fifth part of the entire population. The Bábhans are neither Rájputs nor Bráhmans, but resemble both, though claiming to rank as Bráhmans. It is stated that they were originally a low Aryan race, who were brought into close contact with the Rájputs, probably in some of their struggles for supremacy; and who, not being allowed to intermarry, or form one people with them, have acquired a respectability of their own by pretending that they are Bráhmans. This rank, however, is not conceded to them by other castes. The total number of Bábhans in Monghyr District is 175,195. Other respectable castes are the Káyasths or writers, 23,044 in number, and the Baniyás or traders, 48,831.

Among lower-caste Hindus are the Goálas, who are cattle-dealers, herdsmen, and dairymen, and chiefly inhabit the tract north of the Ganges. They are the most numerous caste in the District, and are returned in the Census of 1881 as numbering 217,616. Other Hindu castes, arranged according to numerical superiority, and not according to status, include the following:—Musahár, 123,337; Dhánuk, 118,940; Dosádh, 108,433; Koerí, 92,652; Kandu, 59,864; Telí, 56,632; Tántí, 54,011; Chamár, 52,634; Kahár, 47,408; Nápit, 39,106; Kúrmí, 38,610; Tatwá, 34,449; Kumbhár, 31,007; Barhai, 27,016; Mallah, 22,294; Dhobí, 20,061; Tior, 19,235; Sonár, 18,167; Madak, 15,901; Baruí, 14,087; Pásí, 13,996; Dom, 12,910; Kalwár, 11,956; and Bind, 10,080. Caste-rejecting Hindus numbered 6495, of whom 2759 were Hindus.

The Christian community, numbering 1091, comprises 393 Europeans, 358 Eurasians, 200 natives, and 140 'others.' The Church Mission Society and the Baptist Mission have stations both at Monghyr and Jamálpur, and Church of England and Roman Catholic churches exist at Jamálpur, where there is a considerable European and Eurasian community, employed in connection with the East Indian Railway workshops. The native Christians belong principally to the poorer classes, but are rather better off than ordinary natives in the same position. Converts from the country villages almost invariably find their way to the towns and settle in them.

Town and Rural Population.—The population of the District is

almost entirely rural. The Census Report of 1881 returns seven towns containing upwards of five thousand inhabitants, namely—MONGHYR, the chief town and administrative head-quarters of the District, 55,372; JAMALPUR, containing the iron workshops, foundries, etc., of the East Indian Railway, the largest workshops of the kind in India, 13,213; SHAIKHPURA, 12,517; BARHIYA, 11,679; BARBIGHA, 7904; KHUTHA, 5095; and MATHURAPUR, 5130. These seven towns contained a total of 110,910 inhabitants, or 5·6 per cent. of the District population, leaving 1,858,864, or 94·4 per cent., as forming the rural population. The Census Report of 1881 thus classifies the 6448 villages and towns:—As many as 3733 contained less than two hundred inhabitants; 1610 between two and five hundred; 773 between five hundred and a thousand; 283 between one and two thousand; 34 between two and three thousand; 8 between three and five thousand; 3 between five and ten thousand; 3 between ten and fifteen thousand; and 1 with upwards of fifty thousand inhabitants.

As regards occupation, the Census Report divides the male population into six classes:—(1) Professional class, including Government servants, 11,329; (2) domestic servants, inn and lodging-house keepers, etc., 43,943; (3) commercial class, including merchants, bankers, traders, carriers, etc., 36,755; (4) agricultural and pastoral class, including gardeners, 315,845; (5) manufacturing and industrial class, 62,685; (6) indefinite and non-productive class, comprising general labourers, male children, and persons of unspecified or of no occupation, 498,567.

Agriculture.—The cultivation of rice is the principal occupation of the people. Wheat and Indian corn are the two next important crops. The area under cultivation with wheat is rapidly increasing. The other important crops are indigo and opium, which are grown and manufactured under Government supervision, Monghyr forming a Sub-Agency subordinate to the Patná Agency of the Government Opium Department. In the southern part of the District, where the land lies high, irrigation is general. The most important works for the purpose of irrigation are those on the Kharakpur estate of the Mahárájá of Darbhangah. This property was for several years under the management of the Court of Wards, during the minority of the Mahárájá; and one of the results of this management is the completion of a work which will irrigate, when necessary, an area of more than 70,000 acres. The cultivated area is largely held under the tenure known as *bháoli-jot*, by which the tenant pays rent, in money or kind, according to the out-turn of his crops in each year. It is popular with the tenantry, and of ancient standing. Nearly all the cultivators are tenants-at-will; and where the rents are fixed, the rates are higher than those usual in Bengal for similar classes of land.

According to the Revenue Survey, which was concluded in Sep-

tember 1847, the total cultivated area in the District was given at 1,311,768 acres, the uncultivable area at 284,365 acres, and the uncultivated at 539,178 acres. More recent figures cannot be relied on; but it is known that cultivation has largely extended during the past thirty years. A holding of over 25 acres of land would now be considered an unusually large farm, though holdings of 33 to 100 acres are to be found; less than 4 acres would be looked upon as very small. A farm of 12 acres can comfortably support a husbandman. The people are poor, and the wages of labour and the price of food, although they have increased of late years, are still low. The daily wage for which coolies and road-labourers can be engaged is from 2¼d. to 3d. a day. The price of the common qualities of rice is ordinarily about 5s. a cwt., and of wheat about 9s. a cwt. In 1883-84, a year of deficient harvest, the average price of common rice throughout the year was 6s. per cwt., and of wheat 7s. 3d. per cwt. It is reported that the sale of rice at 7s. a cwt. in January and February—at a time of year when the harvest has just been reaped and prices are lowest—would be a warning of the approach of famine.

Natural Calamities in Monghyr District are mainly due to drought, and in a less degree to flood. But any noteworthy scarcity has been of rare occurrence; and it is said that the only droughts of such severity as to deserve special notice have occurred of late years—that is to say, in 1865 and 1873—resulting in the famines of 1866 and 1874. The famine of 1865-66 was most severely felt in the south-west of the District, where rice forms the staple crop. Prices first rose to excessive rates in October 1865, when gratuitous distribution of food was begun in the town of Monghyr. The reaping of the scanty winter harvest diverted the indigent population for a season; but in May 1866, it was found necessary to undertake relief operations on a large scale. The month of greatest suffering was September, when rice rose to 16s. per cwt. The highest daily number of persons receiving relief was 3450. As usually happens, cholera and other diseases greatly increased the mortality. According to police returns, the total number of deaths from starvation in the year 1866 was 642; and from diseases engendered by want, 605. The threatened famine of 1873-74 may be said to have been altogether averted by the prompt intervention of Government, and by the facilities afforded by the railway for importation. On this occasion it was again the rice crop which failed, especially in the south-west and north-east of the District; while the spring crops turned out well. The total amount of grain imported through the agency of Government was 8125 tons; and the total expenditure on all heads was £233,000, of which the larger portion was applied in advances, subsequently recovered.

Manufactures and Trade, etc.—The name of Monghyr is famous

throughout India as that of the Indian Birmingham, though its manufactures of iron are now on the decline. Fire-arms, swords, and iron articles of every kind are still produced in abundance, but marked by cheapness rather than quality. A serviceable double-barrel gun can be obtained at Monghyr for £2, and a large double-barrel pistol for £1. The art of inlaying sword-hilts and other articles with gold or silver affords employment to about 20 families. The entire process of iron manufacture, from smelting the ore to hammering out delicate ornaments, is carried on in the District. The ore is principally brought from the hills of Kharakpur. At the present day, the manufacture of indigo, by European capital and under European supervision, is by far the most important industry in Monghyr. The total area under indigo is estimated at about 10,000 acres, with an average out-turn of 2900 cwts. of dye. There are also extensive slate quarries at Abháipur under European management. Among minor industries may be mentioned weaving, dyeing, cabinet-making, and boot-making, at the town of Monghyr; soap-boiling; making water-bottles of clay; carving *lingas* or emblems of Siva out of chlorite; and basket-weaving and straw-work.

The District, being favourably situated for trade both by river and rail, exports large quantities of agricultural produce to Calcutta. When the Ganges is in flood, carriage by boat is preferred; but the native merchants are always ready to use the railway when immediate despatch becomes of importance. Trade is chiefly in the hands of immigrants from Lower Bengal of the Telí and Sonárbaniya castes; but Musalmáns monopolize the export of hides, and the traffic up-stream is conducted by Márwárís from the North-West. The registration returns for 1876-77 show a total of exports valued at £430,000, against imports valued at £314,000. Nearly two-thirds of the exports were sent by river, whereas more than half the imports came by rail. The principal river ports are Monghyr town, Khargariá, and Surájgarha; the railway stations with most traffic are Monghyr, Barhiya, Lakhi-sarái (Luckee-serai), Kajra, Jamúi, and Jamálpur. Among the exports, the following were the chief items in 1876-77:—Oil-seeds, £132,000; wheat, £75,000; gram and pulse, £70,000; indigo, £29,000; rice, £28,000; *ghí*, £26,000; hides, £22,000; and tobacco, £11,000. The imports were mainly confined to European piece-goods, £144,000; salt (also from Europe), £111,000; and sugar from the North-West, £21,000. Later trade statistics are not available, owing to an alteration in the system of registration.

Administration.—It is not practicable to institute any comparison between the present revenue and expenditure of Monghyr District and the figures for years earlier than 1850. The land, excise, and other revenue was for the most part paid into the Bhágalpur treasury, and the

accounts were not separately kept. In 1850-51, the net revenue of Monghyr District was £107,710; in 1860-61, it was £109,389; and in 1870-71, it had risen to £131,228 net. These figures exclude mere matters of account and purely local receipts, and also imperial charges which are not expenditure on the District administration. In 1883-84, the revenue of Monghyr District from six main sources of revenue amounted to £164,955, made up as follows:—Land tax, £88,616; excise, £37,156; stamps, £18,518; registration, £2075; road cess, £14,225; municipal taxes, £4365. In 1874-75, there were 4053 estates of all kinds on the revenue roll, and the total land revenue of the District was returned at £94,034, or an average payment by each estate of £23, 4s. Sub-division of property is still going on; and in 1883-84, the number of estates had increased to 5838, held by 48,616 proprietors, while the land revenue had decreased to £88,616; average payment by each estate, £15, 3s. 5d.; by each proprietor, £1, 16s. 5d.

The means of affording protection to person and property have been steadily increased of late years. In 1832, the year after the District was first constituted, there was 1 magisterial, 1 civil and revenue court, and 1 covenanted officer stationed in Monghyr District; in 1884, there were 7 magisterial and 4 civil judges' courts, and 4 European covenanted officers. The District and town police force, according to the returns of 1883, consisted of 2 superior European officers, 63 subordinate native officers, and 423 constables; and the total annual cost of maintenance was £8541. The rural or village police numbered 3636 men, maintained at an estimated cost in money and lands of £9379. The police, therefore, of all sorts consisted of a total of 4124 officers and men, equal to an average of 1 man to every 478 of the population. The aggregate cost was £17,920, or about equal to a charge of 2¼d. per head of the population. In the jail at Monghyr, and the subordinate lock-ups at Jamúi and Begu Sarái, the average daily number of prisoners in 1883 was 180·25, of whom 10 were females.

The progress of education has been very rapid in Monghyr of late years. The number of Government and aided schools was 8 in 1856-57, and 15 in 1870-71, while the increase in the number of pupils was from 439 to 627. But under the operation of Sir George Campbell's educational reforms, by means of grants in aid, the number of Government and aided schools increased in 1874-75 to 229, and the number of pupils to 6675; while in 1882-83, when that system had obtained its full development, the number of schools had risen to 2800, with 30,617 pupils. There were also 4 girls' schools, for which no returns of pupils are given. There is one higher-class English school in the District, situated at Monghyr town, with 344 pupils in 1882-83. Two towns only in the District have been placed under municipal government, the town of Monghyr itself and Jamálpur. In Monghyr, the

gross municipal income amounted in 1883–84 to £3392, and the rate of municipal taxation was 1s. 2⅝d. per head of the population. In Jamálpur, the income amounted in the same year to £1521, and the rate of taxation was 2s. 3d. per head of the population. This exceptionally heavy rate in Jamálpur is occasioned by the inclusion of the house-tax, levied on the premises of the East Indian Railway Company.

Medical Aspects.—The climate of Monghyr is dry, and considered healthy. The temperature is high in the hot weather, reaching 107° F. in the month of May; but the cold weather is cool and pleasant, and generally agreeable to Europeans, who frequently resort to Monghyr for change and rest after labour in the Bengal plains. The rains are not heavy, the annual average for a period of twenty years ending 1881 being 45·9 inches. Malarial fever is, under the favourable conditions of climate, comparatively uncommon; cholera, however, is epidemic. Elephantiasis Græcorum, a form of leprosy, is very common both in its tubercular and in its anæsthetic or atrophic type. A special account of the pathology of this disease, written by the Civil Surgeon of the District in 1863, in answer to a series of interrogatories from the London College of Physicians, will be found in *The Statistical Account of Bengal*, vol. xv. pp. 192 *sqq*. There are three dispensaries in the District, which afforded relief in 1883–84 to 715 in-door and 23,667 out-door patients. [For further information regarding Monghyr, see *The Statistical Account of Bengal*, by W. W. Hunter, vol. xv. pp. 1–215 (Trübner & Co., London, 1877). Also the *Bengal Census Report* for 1881; and the several annual Bengal Administration and Departmental Reports of the Bengal Government.]

Monghyr.—*Sadr* or head-quarters Sub-division of Monghyr District, Bengal, lying between 24° 57′ and 25° 49′ N. lat., and between 85° 57′ 30″ and 86° 55′ E. long. Area, 1559 square miles; towns and villages, 2384; houses, 118,314. Population (1881) 834,376, of whom 753,034 were Hindus, 78,758 Muhammadans, 926 Christians, 1632 Santáls, and 26 Kols. Proportion of males in total population, 49·4 per cent.; average density of population, 535 persons per square mile; villages per square mile, 1·53; persons per village, 350; houses per square mile, 79; inmates per house, 7. This Sub-division comprises the five *thánás* (police circles) of Monghyr, Jamálpur, Surájgarha, Kharakpur, and Gogri. In 1883 it contained 7 magisterial and 2 civil courts; the regular police consisted of 345 men, and the rural force or village watch of 1410.

Monghyr (*Mungír*).—Chief town and administrative head-quarters of Monghyr District, Bengal; situated on the south bank of the Ganges, in lat. 25° 22′ 32″ N., and long. 86° 30′ 21″ E. Population in 1881, 55,372 persons; area of town site, 4876 acres.

General Description.—Monghyr has been a place of considerable importance since the earliest days of the English occupation of Bengal,

although it did not become a civil station until 1812. The old Musalmán fort was once occupied by a regiment belonging to the East India Company. At present, Monghyr is a purely civil station, and in some respects one of the most picturesque in Bengal. It consists of two distinct portions—the fort, within which are situated the public offices and residences of the Europeans; and the native town stretching away from the former eastward and southward along the river. The fort is formed by a great rampart of earth enclosing a rocky eminence, which projects some distance into the Ganges, and is faced with stone. It was probably at one time a strong fortification. Towards the north, the river comes up to the walls, forming a natural defence; to the landward, a deep, wide ditch surrounds and protects the fort. On entering from the railway station by the Lál Darwáza or Red Gate, the principal entrance, Monghyr presents a very pretty appearance. The main road runs southwards between two large tanks, behind each of which rise low hills. On one of these stands the Karna Chaura house, the property of the Mahárájá of Vizianágaram; and on the other, a fine building known as the palace of the Sháh Sáhib, and now the residence of the Collector, behind which is the residence of Sháh Shujá, son of Akbar, which has been converted into a jail. Between the hills lie the Government gardens, with trim hedges and neat wire-fencing. Beyond the gardens, and usually on low eminences, are the houses of the other Europeans.

Population.—Dr. Buchanan-Hamilton in 1811 estimated the population of Monghyr town at 30,000. An experimental Census in 1869 showed 53,891 persons, living in 13,179 houses; while the regular Census of 1872 returned the inhabitants of the town at 59,698, inhabiting 10,265 houses. The last enumeration in 1881 showed 55,372, namely, males 26,051, and females 29,321. Hindus numbered 42,636; Muhammadans, 12,498; 'others,' 238. The municipal income of Monghyr town in 1883–84 was £3392, the average incidence of taxation being 1s. 2⅝d. per head of the population.

Origin of the Name.—The origin of the name of Monghyr is very uncertain. It is said that the place was formerly called Madgalpurí or Madgalasrám, from its having been the abode of Madgal Múní, a hermit saint, who lived in the early ages of the world. Another explanation, founded on the authority of the *Haribaṇsa*, derives the name from a certain Madgal Rájá, one of the sons of Viswalmitra, son of a Gadhi Rájá, who received this part of his father's dominions. Dr. Buchanan-Hamilton states that on an inscription, seven or eight centuries old, found at Monghyr, and perhaps more ancient than the *Haribansa*, the name is written Madgagírá, or the hill of Madga, and not Madgalpurí, or the abode of Madgal. The existence, therefore, both of the saint and prince is very doubtful. Probably the name has

a much more humble origin, as *madga* is the Sanskrit word for a kind of pulse, the Phaseolus mungo of Linnæus.

History.—A copper plate found on the site of the fort in 1780 contains an inscription in antique characters of uncertain date, recording that the armies of Rájá Deb Pál of Patná here crossed the Ganges by a bridge of boats. To the Pál dynasty is assigned a date coming down to the 11th century A.D. Shortly afterwards, in 1195, Monghyr appears to have been taken by Muhammad Bakhtiyár Khiljí, the first Musalmán conqueror of Bengal. Henceforth it is often mentioned by the Muhammadan chroniclers as a place of military importance, and was chosen as the seat of the local Government. Prince Dányál, son of Husáin Sháh, the Afghán king of Gaur, repaired the fortifications in 1497, and built a vault over the tomb of Sháh Náfah, the Muhammadan patron of the town, as is shown by an inscription still extant. In 1590, when the Mughal Emperor Akbar succeeded in establishing his supremacy over the Afghán chiefs of Bengal, Monghyr was long the head-quarters of the imperialist general Todar Mall, who again restored the walls. Monghyr also figures prominently during the rebellion of Sultán Shujá against his brother, Aurangzeb. In more recent times, when the Nawáb Mír Kásim was already contemplating the assertion of his independence against the English, he selected Monghyr as his residence and the centre of his military preparations. The fame of Monghyr armourers is said to date from the arsenal which he established. A spot by the side of the fort is still pointed out as the scene of the memorable outrage, when the two Seths, the great Hindu bankers of Murshidábád, were thrown into the Ganges, on the charge of favouring the English cause. After his defeat at Udhanála in 1763, Mír Kásim retreated up the river towards Patná, and the fort of Monghyr no longer figures in history.

Monierkhál.—Village and frontier outpost in Cachar District, Assam; on the Sonái river, near the frontier of Manipur and the Lushái Hills. In January 1871, the small garrison of Sepoys stationed here was fiercely attacked by a body of Lusháis for two days and two nights, but successfully held out until relieved. This attack was an incident in the raid which led to the retributive Lushái expedition in the following cold season. Monierkhál is now connected by a good road with Nagdirgrám, and so with Silchar town, 24 miles distant. In the neighbourhood are a few tea-gardens. Monierkhál is eight miles distant as the crow flies from Mainadhar, an outpost station on the Bárak, manned by frontier military police, but the Bhuban range (elevation 2600 feet) intervenes. Monierkhál itself is garrisoned by a detachment of the native infantry regiment whose head-quarters are at Silchar town. It forms one of the links in the southern line of defence against raids by the Lusháis.

Mons.—Aboriginal race of Burma.—*See* TALAINGS.

Montgomery.—District in the Lieutenant-Governorship of the Punjab, lying between 29° 58′ and 31° 33′ N. lat., and between 72° 29′ 30″ and 74° 10′ 30″ E. long. Area, 5574 square miles. Population in 1881, 426,529 persons. Montgomery forms the north-eastern District of the Múltán Division. It is bounded on the north-east by Lahore District; on the south-east by the river Sutlej (Satlaj), which separates it from Baháwalpur State; on the south-west by Múltán District; and on the north-west by Jhang District. Montgomery stands fifth in order of area, and twenty-third in order of population among the Districts of the Punjab, comprising 5·23 per cent. of the total area, and 2·26 per cent. of the total population of the Province. The shape of the District is that of a rough parallelogram, the sides running at right angles to the Sutlej and Rávi rivers forming its breadth, and those running parallel to them its length. The extreme length of the District, from Thatha Suratan on the Lahore border, to Bub on the Rávi where that river enters Múltán, is about 90 miles. The extreme breadth, from Sáhibwála on the Sutlej to the Marri (Murree) road at the Jhang boundary, is 74 miles. Of the four *tahsíls* or Sub-divisions comprising the District, Montgomery lies to the north-west, Gugairá to the north-east, Dipálpur to the south-east, and Pák Pattan to the south-west. Not much more than one-third of the whole area of the District is included within village boundaries; the remaining two-thirds, which constitute the great grazing grounds of the *bár*, are the property of the Government. The administrative head-quarters are at the town of MONTGOMERY, upon the Lahore and Múltán Railway.

Physical Aspects.—The District of Montgomery, formerly known as Gugairá, occupies a wide extent of the Bári Doáb, or wedge of land between the Sutlej (Satlaj) and the Rávi, besides stretching across the latter river into the adjoining Rechna Doáb. In the former tract, a fringe of cultivated lowland skirts the bank of either great boundary stream; but the whole interior upland, beyond the fertilizing influence of their waters, consists of a desert plateau, partially overgrown with brushwood and coarse grass, which are interrupted at places by an impenetrable jungle, impassable alike for man or horse. On the farther side of the Rávi, again, the country at once assumes the same desert aspect, which continues across the whole Rechna Doáb, till the land dips once more into the valley of the Chenáb, in the neighbouring District of JHANG. This portion of Montgomery, known as the *bár*, exactly resembles the Jhang desert, being quite devoid of water in the dry season, but covered after the rains with scanty vegetation, which affords pasture to large herds of cattle, under the charge of a few scattered nomad families. Close to the Rávi, a few acres have been brought into cultivation by means of inundation channels cut from the river.

Budáun District. In the lower reaches of its course, the Ganges has recently cut into Moradábád District by new channels, which frequently cause disastrous inundations. (2) The Sot, the next river to the eastward, takes its rise in a pond in the north-west of the central northern *tahsíl* of Amroha, flowing in a general south and south-easterly direction through Moradábád till it passes into Budáun District. The river runs in a spongy bed, and has a considerable volume of water at all seasons, but is not navigable. The valley of the Sot is noted for its insalubrity, and malarious fever is so common that the people are often too weak to reap their harvest, and fields of grain are left to rot in the mud. (3) The Rámgangá is the chief river of the District

Monwel.—Petty State in the Soráth *prant* or division of Káthiáwár, Bombay Presidency; consisting of 3 villages, with two separate shareholders. Area, 31 square miles. Population of Monwel village (1881) 1928; of the petty State, 2785. Situated 9 miles south-east of Manikwáda. Estimated revenue in 1881, £2000; tribute of £31, 5s. is paid to the Gáekwár.

Monze (or *Monza*).—Frontier cape of Sind, forming the eastern promontory at the mouth of the Hab river.—*See* RAS MUARI.

In the bush jungles in the northern *tahsíls* of Thákurdwára and eastern Amroha, tigers and leopards are occasionally met with. Spotted deer, hog-deer, *nílgái*, and wild hog are also found in the same tracts. The wolf, fox, badger, otter, weasel, porcupine, and monkey are found

Mor (or *Maureksha*).—River of Bengal, rising in the District of the Santál Parganás in the Tior Hill, a little east of Deogarh. After a general south-easterly course, the Mor enters Bírbhúm in lat. 23° 59′ N., and long. 87° 29′ 30″ E., near the village of Haripur; flows through Bírbhúm District from west to east, and leaves it below Sahora to pass into Murshidábád, where it takes a north-easterly course and joins the Dwarká, which flows into the BHAGIRATHI, a branch of the Ganges. The Mor is occasionally navigated during the rains, but only by descending boats. For some miles from its source in the Tior Mountain, the Mor is called the Motíhara. At the summit of the hill, the people point out some roughly-arranged blocks of rude stone, as the remains of the fort of one Khusiál Singh, a Rájput adventurer who established himself here as Rájá of the hill people during the last century, and was slain in battle at the foot of the hills by the Kshattriya Rájá of Handua, in a spot still known as 'Rájámára.'

Mora.—Port of the town of Uran, in Thána District, Bombay Presidency. There are here 22 distilleries, supplying Bombay, Thána, and Kolába with liquor, the still-head duty on which amounted in 1880–81 to £115,429 at the distilleries. Much of the salt from the very extensive salt-works at Uran is shipped from this port. Average annual value of trade during five years ending 1881–82

Montgomery. — District in the Lieutenant-Governorship of the Punjab, lying between 29° 58′ and 31° 33′ N. lat., and between 72° 29′ 30″ and 74° 10′ 30″ E. long. Area, 5574 square miles. Population in 1881, 426,529 persons. Montgomery forms the north-eastern District of the Múltán Division. It is bounded on the north-east by Lahore District; on the south-east by the river Sutlej (Satlaj), which separates it from Baháwalpur State; on the south-west by Múltán District; and on the north-west by Jhang District. Montgomery stands fifth in order of area, and twenty-third in order of population among the Districts of the Punjab, comprising 5·23 per cent. of the total area, and 2·26 per cent. of the total population of the Province. The shape

and Meerut (Merath) Districts. The administrative head-quarters are at the city of MORADABAD.

Physical Aspects.—The District of Moradábád lies wholly within the great Gangetic plain, and displays throughout the usual characteristics of that level expanse. The rivers Rámgangá and Sot demarcate the country into three minor sub-divisions, all of which resemble one another in their general appearance, though differing in points of small detail. The eastern tract, beyond the Rámgangá, bordering on the

much more than one-third of the whole area of the District is included within village boundaries; the remaining two-thirds, which constitute the great grazing grounds of the *bár*, are the property of the Government. The administrative head-quarters are at the town of Mont-

either side, and produces excellent crops of grain. The central portion of the District between the Rámgangá and the Sot comprises a level Doáb, descending at each end into the valleys of its boundary rivers. The western tract, between the Sot and the Ganges, has a gentle slope toward the latter river on the west, and dips rapidly into the *khádir* or narrow Gangetic lowlands a few miles from the actual bank.

The District is well wooded throughout, and mango groves abound in the neighbourhood of the flourishing villages which cluster thickly over its whole surface. Cultivation has spread over almost every part, patches of jungle rarely occurring, and only a few stray pieces of sandy soil or *úsar* waste being found at intervals among the uplands. Shallow lakes (*jhíls*) are scattered at places throughout the District, and are in every case utilized for irrigation. The highest point, at Raghuwála, in the eastern portion beyond the Rámgangá, has an elevation of 766 feet above sea-level; the lowest point, at Chaharpur, has an elevation of 598 feet, the average being 670 feet. The District as a whole consists of a well-tilled and somewhat monotonous alluvial plain, unrelieved by any striking natural features.

The three principal rivers of Moradábád are — (1) The Ganges, which forms the natural western boundary of the District for a distance of nearly forty miles, flowing nearly north and south till it enters

Budáun District. In the lower reaches of its course, the Ganges has recently cut into Moradábád District by new channels, which frequently cause disastrous inundations. (2) The Sot, the next river to the eastward, takes its rise in a pond in the north-west of the central northern *tahsíl* of Amroha, flowing in a general south and south-easterly direction through Moradábád till it passes into Budáun District. The river runs in a spongy bed, and has a considerable volume of water at all seasons, but is not navigable. The valley of the Sot is noted for its insalubrity, and malarious fever is so common that the people are often too weak to reap their harvest, and fields of grain are left to rot in the mud. (3) The Rámgangá is the chief river of the District proper, entering Moradábád from Bijnaur on the north, and after flowing a south-easterly course through Thákurdwára and Moradábád *tahsíls*, past Moradábád town, enters Rámpur State, and finally joins the Ganges in Hardoi District of Oudh, nearly opposite Kanauj. Numerous smaller streams and watercourses, tributaries of the above rivers, intersect the District; but the Ganges and Rámgangá are the only two navigable channels, although they are not used for that purpose to any great extent.

In the bush jungles in the northern *tahsíls* of Thákurdwára and eastern Amroha, tigers and leopards are occasionally met with. Spotted deer, hog-deer, *nílgái*, and wild hog are also found in the same tracts. The wolf, fox, badger, otter, weasel, porcupine, and monkey are found more or less throughout the District. The commoner game birds include the quail, grey and black partridge, wild duck of many varieties, bustard, snipe, wild goose, etc. Fish of many varieties are found in the rivers, and form an important element in the food-supply of the people, affording employment to about 5000 families of fishermen.

History.—Rohilkhand in the earliest times formed part of the Aher or Ahír kingdom of Panchála, and to the present day Ahars still hold the south-eastern *parganás* of the modern District of Moradábád. Ahíchhatra in Bareli appears to have been their capital, though Sambhal in Moradábád early rose to importance. Hiuen Tsiang visited Kásipur and Ahíchhatra in the 7th century, but does not mention Sambhal. From the beginning of the Muhammadan supremacy, however, that town was selected as the head-quarters of the local government. In 1266, Ghiyás-ud-dín Balban invaded the District, and attacked Amroha, where he ordered a general massacre. In 1365, Firoz Tughlak invaded Kather or Kathár, as Rohilkhand was then called, to punish a chief named Rái Kakára, who had murdered the Musalmán governor. Rái Kakara fled to Kumáun, whereupon the Emperor plundered the country, and left Málik Khitáb as governor. In 1403, Ibráhím, the famous Sultán of JAUNPUR, conquered Sambhal, and placed his own deputy in the town; but four years later, Muhammad Tughlak, Emperor of Delhi, expelled

the intruder, and replaced his own officials. In 1473, under Sultán Husáin, the Jaunpur dynasty once more established itself for a while in Sambhal. In 1498, the Emperor Sikandar Lodi recovered the District for the Delhi throne, and resided at Sambhal for four years. Thenceforward the surrounding country remained a permanent fief of the imperial court.

In the middle of the 16th century, Ahya Maran, Governor of Sambhal, rebelled against Sultán Muhammad Adíl, and defeated a force sent against him by the Emperor. In the succeeding year, Rájá Mittar Sen, Katháriya, seized Sambhal, and Ahya Maran attacked him. A fierce battle ensued at Kundarkhi, in which the Rájá sustained a crushing defeat. Under Humáyún, Alí Kuli Khán was Governor of Sambhal, and repelled an incursion of the still independent Katháriyas. In 1566, some Mirzás, descendants of Timúr, rebelled, and seized Akbar's officers, whom they confined in the fort of Sambhal. Husáin Khán marched against them, and they fled to Amroha. On his following them up to their retreat, they finally escaped across the Ganges. The Emperor Sháh Jahán appointed Rustam Khán, Governor of Kathár; and he founded Moradábád about 1625, calling it first after his own name, but altering it at a later period in honour of Murád Sháh, one of the imperial princes, who was afterwards murdered by Aurangzeb. On the death of that Emperor, and subsequent decline of the central power, the Katháriyas revolted, becoming independent for a time, and the Musalmán governor removed his head-quarters to Kanauj. In 1735, however, Muhammad Sháh recovered the Province, and replaced his deputy at Moradábád. For eleven years Rohilkhand remained nominally subject to the Delhi Emperors; but its Rohillá chieftains really maintained a state of all but complete independence.

Like the rest of the surrounding plain, Moradábád fell to the Wazír of Oudh in 1744, and to the British in 1801 (*see* Bareli [BAREILLY] District). Thenceforward it possesses no history until the outbreak of the Mutiny in 1857. News of the Meerut rising arrived on the 12th of May in that year, and on the 18th the Muzaffarnagar rebels were captured. Next day, however, the 29th Native Infantry mutinied, and broke open the jail; but on the 21st they united with the artillery in repelling a Rámpur mob. On the 31st, the Rámpur cavalry, which had gone to Bulandshahr, returned; and on the succeeding day, news of the Bareli (Bareilly) and Sháhjahánpur outbreaks arrived. On the 3rd of June, the 29th Native Infantry fired on the officials, who then abandoned the station, and reached Meerut in safety on the 5th. Ten days later, the Bareli Brigade arrived at Moradábád, and shortly afterwards marched on for Delhi, taking with them the local mutineers. At the end of June, the Nawáb of Rámpur took charge of the District for the English; but he possessed little authority, and a rebel named Majju

Khán was the real ruler of Moradábád, till the arrival of General Jones' brigade on 25th April 1858, when he was hanged. Early in May, the District was occupied by the Judge of Moradábád, with a body of troops, and order was restored.

Population.—The Census of 1853 returned the total number of inhabitants of Moradábád District, upon its present area of 2281 square miles, at 1,052,248, excluding the cantonment of Moradábád, or including the cantonment, 1,053,462. At the next Census in 1865, the total population, including the cantonment, European and Eurasian inhabitants, was 1,023,257, showing a decrease of 30,205, or 2·8 per cent., in the twelve years since 1853, mainly due to the disturbing influences of the Mutiny. By 1872 the population had more than recovered itself, and in that year was returned at 1,122,357, showing an increase of 99,100, or 9·7 per cent., since 1865. The last enumeration in 1881 showed that the population of Moradábád had reached the stationary stage, being returned at 1,153,173, giving an increase of 32,816, or 2·9 per cent., for the nine years from 1872 to 1881.

The results of the Census of 1881 may be briefly summarized as follows:—Area of District, 2281·8 square miles, with 13 towns and 2433 villages, and 143,631 houses. Total population, 1,155,173, namely, males 610,291, and females 544,882; proportion of males in total population, 52·8 per cent. The excessive proportion of males is due in a large degree to the practice of female infanticide among certain castes, such as Rájputs, Játs, Gújars, Ahírs, Tagás, etc., and which has not yet been quite stamped out. In seven clans suspected of this practice, and as such proclaimed under the Criminal Tribes Act, the Census of 1881 returned their total number at 161,148, the proportion of males being as high as 56·2 per cent. Average density of the population, 506 persons per square mile; towns and villages per square mile, 1·7; number of persons per town or village, 472; houses per square mile, 62·9; inmates per house, 8·0. Classified according to sex and age, the population consists of—under 15 years of age, boys 237,249, and girls 203,665; total children, 440,914, or 38·1 per cent. of the total population: 15 years and upwards, males 373,042, and females 341,217; total adults, 714,259, or 61·9 per cent.

In classifying the population according to religion, the Census Report shows that Moradábád contains a larger number and proportion of Muhammadans than any other District of the North-West. Hindus number 767,844, or 66·4 per cent. of the total population; Muhammadans, 384,713, or 33·3 per cent.; Christians, 1877; Jains, 571; Sikhs, 165; and Pársís, 3. Among the higher castes of Hindus, Bráhmans number 47,616; Rájputs, 33,503; Baniyás, 30,458; and Káyasths, 10,370. Of the lower or Súdra castes, the most important from a numerical point of view, are—Chamár, 179,568; Málí, 63,650;

Ját, 50,424; Ahar, 37,306; Kahár, 30,777; Bhángi, 24,721; Gadááir, 23,703; Kumbhár, 22,026; Ahír, 16,567; Káchhí, 14,849; Lodhí, 12,734; Gújar, 12,163; Tagá, 10,559; Nái, 10,038; Dhobí, 6671; Sonár, 6278; and Barhái, 6043.

The Muhammadans are divided according to religion into Sunnís (the orthodox sect), 375,150; Shiás (followers of Alí), 9561; and unspecified, 2. Details also of certain tribes of Muhammadanized Hindus are given by the Census. These comprise, Muhammadan Rájputs, 5136; Tagás, 6714; Mewátis, 934; Gújars, 348; and Játs, 78.

The Christian population (1877) consists of — Europeans, 373; Eurasians, 109; Armenian, 1; and native converts, 1394. The American Episcopalian Mission has four stations in the District, at Moradábád, Chandausí, Sambhal, and Amroha, and maintained, in 1882, 7 churches, free from debt, and 45 schools, with 66 teachers and 1328 pupils, of whom 1086 were non-Christians.

Town and Rural Population. — The population shows a marked tendency to gather into considerable towns, of which the District contained in 1881 as many as thirteen with a population exceeding 5000, namely—MORADABAD, 67,387; AMROHA, 36,145; CHANDAUSI, 27,521; SAMBHAL, 21,373; SARAI TARNI, 11,585; HASANPUR, 9142; BACHHRAON, 7046; KANT, or MAUNAGAR, 6936; SIRSA, 5947; THAKURDWARA, 6511; DHANAWRA, 5304; AGHWANPUR-MUGHALPUR, 5277; and NARAULI, 5069.

The total urban population thus disclosed amounts to 215,243, or 18·6 per cent. of the District population, leaving 939,930, or 81·4 per cent., as forming the purely rural community. Of the total of 2446 towns and villages comprising the District, 890 are returned as containing less than two hundred inhabitants; 972 from two to five hundred; 439 from five hundred to a thousand; 106 from one to two thousand; 14 from two to three thousand; 12 from three to five thousand; 8 from five to ten thousand; 1 from ten to fifteen thousand; 3 from twenty to fifty thousand; and 1 upwards of fifty thousand inhabitants.

As regards occupation, the Census Report distributes the male population among six great classes, as follow:—The first or professional class numbers 9779, amongst whom are included 3766 persons engaged in the general government of the country, 665 engaged in the defence of the country, and 5348 engaged in the learned professions or in literature, art, and science. The second or domestic class numbers 3427, and comprises all males employed as private servants, washermen, water-carriers, barbers, sweepers, innkeepers, etc. The third or commercial class numbers 11,617, and amongst these are all persons who buy or sell, keep or lend money and goods of various kinds, such as shopkeepers, money-lenders, bankers, brokers, etc., 2596; and persons engaged in the conveyance of men, animals, or goods, such as pack-carriers, cart-

drivers, etc., 9021. Of the fourth or agricultural class, besides the 268,674 males engaged in agriculture, the Census returns include 2499 persons engaged about animals, making a total of 271,173. The fifth or industrial class contains 79,123 members, including all persons engaged in industrial arts and mechanics, such as dyers, masons, carpenters, perfumers, etc., 4981; those engaged in the manufacture of textile fabrics, such as weavers, tailors, cotton-cleaners, etc., 36,014; those engaged in preparing articles of food, such as grain-parchers, confectioners, etc., 13,951; and lastly, dealers in all animal, vegetable, or mineral substances, 24,177. The sixth or indefinite class numbers 235,172, including general labourers, 18,067; and persons of independent means, male children, and unspecified, 217,105.

Agriculture.—The total area under cultivation in 1872 amounted to 753,258 acres, and in 1883–84 it was returned at 1,013,767 acres. The staple crops of the District are millets, wheat, pulses, and sugar-cane. There are no Government irrigation works in Moradábád, but 116,936 acres were returned in 1884 as irrigated by private individuals, nearly all from wells. The year is divided into the usual seasons of Upper India—the *rabí* or spring harvest, and the *kharíf* or autumn harvest. The area under each crop in 1883–84 was returned as follows: —*Rabí*—wheat and barley, 393,029; pulses, 34,547; oil-seeds, 1991; and miscellaneous, 7055: *Kharíf*—rice, 128,557; cotton, 57,240; millets, 317,731; oil-seeds, 1252; and miscellaneous, 138,894 acres. The staples belonging to neither season were—sugar-cane, 39,835 acres; vegetables, 3646 acres; and fruit-trees. About 64 lbs. of wheat are sown to the acre, and the total cost of production amounts to £2, 2s.; the out-turn being about 2560 lbs., worth from £2, 8s. to £6, 8s. The cultivation of sugar-cane costs about £5, 16s. an acre, and the expense of cutting and pressing adds about £1, 4s.; so that the total outlay reaches £7, while the yield averages 16,000 lbs., valued at £12, 10s. The last-named industry has largely increased, both in area and value, of late years.

The people are fairly well off, and live better than the peasantry of many other parts. The village communities hold their land upon the ordinary tenures of the North-Western Provinces. Rents are paid both in money and in kind, and in some cases both systems prevail, cash rents being paid for certain special crops, while for others the land-lord still takes his rent on the sharing principle. The total male adult agricultural population in 1881 was returned at 268,674, consisting of 11,877 landed proprietors, 2879 estate agents, 215,162 cultivators, and 38,756 agricultural labourers. Average area cultivated by each male agriculturist, 3·63 acres. The population entirely dependent on the soil, however, numbered 774,561, or 67·05 per cent. of that of the whole District. Of the total area of 2281·8 square miles in 1881, 360·6 square miles were held revenue-free, and the remaining 1921·2 square

miles were assessed for Government revenue. Of the assessed area, 1292·2 square miles were returned as under cultivation; 478·2 square miles as cultivable; and 150·8 square miles as uncultivable waste. Total Government assessment, including local rates and cesses levied upon land, £175,184, or an average of 4s. 1½d. per cultivated acre. Total rental paid by cultivators, including cesses, £342,581, or an average of 7s. 0½d. per cultivated acre. About three-sevenths of the cultivators possess hereditary rights; the remainder hold as tenants-at-will. Wages have risen of late years. Day-labourers received, in 1850, from 1½d. to 3d. per diem; in 1872, from 3d. to 3¾d.: blacksmiths, in 1850, 4½d. per diem; in 1872, 6d.: bricklayers, in 1850, 3d. to 4½d. per diem; in 1872, 6d. to 7½d. The rates of wages at present (1884) current are about the same as those given for 1872. Prices of food-grains ruled as follows in 1884:—Wheat, 20¾ *sers* per rupee, or 5s. 6d. per cwt.; *joár*, 28 *sers* per rupee, or 4s. per cwt.; *bájra*, 26¾ *sers* per rupee, or 4s. 2½d. per cwt.; common rice, 14 *sers* per rupee, or 8s. per cwt.

Natural Calamities.—Floods upon the Ganges and Rámgangá often cause much damage to the crops in the lowlands; but the great danger which overshadows the District is famine, resulting from drought. Scarcity from this or other causes has occurred five times since the introduction of British rule. The first famine, in 1803, directly after the cession, was due, not to the calamities of nature, but to the devastation and losses caused by the Maráthá invasions and the raids of the Pindárí freebooter, Amír Khán. The second famine, in 1825, was aggravated by the practices of rackrenting and throwing lands out of cultivation—the latter resorted to by the landholders in view of the approaching settlement. In the famine of 1837–38, Moradábád suffered less than the southern Districts of the North-Western Provinces, and, indeed, Rohilkhand generally escaped with comparatively slight injury. The fourth famine, in 1861, overtook the people before they had recovered from the depredations of the Mutiny, aggravated by the dry weather experienced since the middle of 1858; and the distress was such, that the people were driven to the use of mango-stones for food. Government relief measures were speedily set on foot, and Moradábád was not among the Districts where the suffering was most intense. The famine in 1868–69 was due to failure of the rains during the summer of the former year, and the absence of showers during the cold weather. Temporary wells proved impossible to construct in the sandy soil, and the distress was heightened by the influx of starving immigrants from Rájputána and the south. Nevertheless, by the aid of Government, the difficulty was tided over without serious losses. Severe distress occurred in 1877–78, which again necessitated the establishment of poorhouses and of relief works. It did not amount to actual famine, but only to

scarcity and dearness of prices, in consequence of which large numbers of people had an insufficient allowance of nutritious food.

Commerce and Trade, etc.—The whole District, except the Moradábád *tahsíl*, exports large quantities of grain; while the excepted *tahsíl* exports 200,000 *maunds* of sugar, and imports grain for local consumption. The principal imports are salt, tobacco, metals, and piece-goods. The number of traders, and the scale of their transactions, have increased of late years. The balance of trade stands in favour of the District, but accumulations are not hoarded after the fashion common in India, being rather invested in increasing the business of their owners. Besides Moradábád city, CHANDAUSI and DHANAURA are large marts for the sugar trade. The main line of the Oudh and Rohilkhand Railway crosses the District from south to north, entering from Bareli, with stations at Chandausi, Bilári, Kundarkhi, Kharakpur, Moradábád, Bhatauli, Mugalpur, Mustapapur, and Kánt, thence passing into Bijnaur District. From Chandausi junction, the Alígarh branch of the same railway diverges south-westward, with stations at Bajhoi and Dhanári. Total length of railway lines in the District in 1884, 41 miles. The District has also 131 miles of metalled and 518 miles of unmetalled roads. The principal routes are those from Meerut (Merath) to Bareli (Bareilly), through Moradábád, and from Moradábád to Anúpshahr and to Náini Tál.

Administration.—The District staff ordinarily comprises a Collector-Magistrate, 2 Joint Magistrates, 1 Assistant Magistrate, and 2 Deputy Magistrates, together with the usual fiscal, medical, and constabulary officials. Moradábád is the seat of a civil and sessions judge, whose jurisdiction extends to the neighbouring District of Bijnaur (Bijnor). The total revenue, imperial, municipal, and local, raised in the District during the year 1875-76 amounted to £198,915, of which sum the land-tax contributed £127,725. Total Government revenue in 1883-84, £212,622, of which the principal items were—Land revenue, £150,113; stamps, £23,598; excise, £9292; provincial rates, £20,448; assessed taxes, £3549; registration, £1456. The total strength of the regular District and town police in 1883-84 was returned at 956 men, being at the rate of 1 policeman to every 2·38 square miles and to every 1208 of the population. The cost of their maintenance amounted to £9084. The District jail in the same year contained a daily average number of 414 prisoners, of whom 393 were males and 21 females. Education in 1883-84 was carried on by means of 176 State inspected and aided schools, with an aggregate of 5744 pupils; being at the rate of 1 school to every 7·71 square miles of area, and 4·9 pupils to every thousand of the population. Of these institutions, 150 are for boys and 26 for girls. The principal is the Government High School at Moradábád town. The total expenditure on education amounted to £3937,

provided by the Provincial treasury. The foregoing figures do not include private and uninspected schools, of which there are many in the District; nor several of the American Mission schools, only some of which receive aid from Government. The Census of 1881 returned a total of 8038 males and 512 females as under instruction, besides 20,372 males and 510 females able to read and write, but not under instruction. For fiscal and administrative purposes, Moradábád is sub-divided into 6 *tahsíls* and 6 *parganás*. The District contained, in 1883–84, 5 municipal towns—namely, Moradábád, Dhanaura, Chandausi, Amroha, and Sambhal. Their aggregate income amounted in that year to £10,098; from taxes, £9044, or 1s. 0½d. per head of the population (171,553) within municipal limits. Eight other towns, although not ranking as municipalities, are subject to local taxation in the shape of a house-tax for police and conservancy purposes.

Medical Aspects.—The climate of Moradábád is generally healthy, except in the submontane tract which borders on the Tarái, and in the lowlands of the Ganges and Sot. It is neither very dry nor very moist, and showers ordinarily occur in every month of the year. During the thirty-two years ending 1881, the average annual rainfall amounted to 40·35 inches; the maximum in that period being 49·3 inches in 1867–68, and the minimum 20·4 inches in 1868–69. The annual mean temperature is about 74·5° F.; the lowest monthly mean being about 56° in January, and the highest 86° in June. The total number of deaths reported in 1883 was 35,128, or 30·75 per thousand; the average death-rate during the previous five years being returned at 36·81 per thousand. Five Government charitable dispensaries—at Moradábád, Chandausi, Bilári, Amroha, and Sambhal—afforded relief during 1884 to 84,951 persons, of whom 1380 were in-door patients. [For further information regarding Moradábád District, see the *Gazetteer of the North-Western Provinces*, vol. ix., by Mr. F. H. Fisher, C.S. (Allahábád, 1883); the *Land Settlement Report of Moradábád District*, by Mr. E. B. Alexander, C.S. (1880); the *North-Western Provinces and Oudh Census Report* for 1881; and the several annual Administration and Departmental Reports of the North-Western Provinces Government.]

Moradábád.—North-eastern *tahsíl* of Moradábád District, North-Western Provinces; conterminous with Moradábád *parganá*, and consisting mainly of a level plain adjoining the State of Rámpur, and watered by the Rámgangá and several minor streams. The *tahsíl* is, on the whole, decidedly fertile in character, and admits in most places of the construction of earthen wells, the water being seldom more than 13 or less than 8 feet from the surface. Area, 312·14 square miles, of which 34·70 square miles are returned as revenue free. Of the total Government assessed area of 277·44 square miles, 178·61 square miles

are returned as under cultivation, 61·74 square miles as cultivable, and 37·09 square miles as barren. Population (1872) 231,100; (1881) 231,863, namely, males 121,656, and females 110,207. Classified according to religion, there were in 1881—Hindus, 134,209, or 57·9 per cent.; Muhammadans, 96,616, or 41·6 per cent.; Jains, 162; and 'others,' 876. Of the 307 villages comprising the *tahsíl*, 183 had less than five hundred inhabitants, while only 2 towns had upwards of five thousand. Total Government land revenue, £26,178, or with local rates and cesses, £29,717. Rental paid by cultivators, including cesses, £53,756. In 1885, Moradábád *tahsíl* contained 2 civil and 3

men, 964 European infantry, and 1135 Native infantry. In cantonments, the Native infantry lines lay along an upper reach of the river, to the south or right front of the force, and also to the north close to the *band*; while below, or to the north of the Native infantry, were the lines of the European officers, stretching along a broad reach of the river, which was here once dammed up so as to form a considerable lake, to afford bathing for the troops.

by Rustam Khán, and named after Prince Murád Bakhsh, son of the Emperor Sháh Jahán. Fort, founded by Rustam Khán, overhangs the bank of the Rámgangá; Jamá Masjid, or chief mosque, a handsome building erected in 1634; tomb of Nawáb Azmat-ullá Khán, Governor of Moradábád. Population (1872) 62,417; (1881) 67,387, namely, males 34,584, and females 32,803. Classified according to religion, Muhammadans number 34,383; Hindus, 32,609; Jains, 141; Christians, 202; and 'others,' 52. Number of houses, 11,080. The town is a large centre of trade for country produce, and has risen considerably in importance since the opening of the railway. Principal imports—grain, sugar, *ghi*, animals for slaughter, oil and oil-seeds, European and native cloth, metals, etc. Moradábád is noted for its metal-work, and especially for inlaid work of brass and tin, which affords employment to several thousands of persons. Chintzes and cotton cloth are also manufactured in the city.

The town is built on a ridge forming the right bank of the Rámgangá, and is naturally well drained into that river. Great improvements have been recently made in its conservancy and sanitary arrangements. The native quarter is intersected by several good thoroughfares, and is divided into 110 *muhallas* or wards. The principal buildings in the native quarter are the Jamá Masjid, municipal hall and literary institute, *tahsíli*, mission church, high school, dispensary, post-office, and jail. Beyond the jail, to the north-west of the town, are the cantonments and civil station, situated among luxuriant trees, and extending from the race-course, a large circular expanse of turf, until it almost touches the Meerut (Merath) road. The Collector's offices and civil courts are situated between the native quarter and

provided by the Provincial treasury. The foregoing figures do not include private and uninspected schools, of which there are many in the District; nor several of the American Mission schools, only some of which receive aid from Government. The Census of 1881 returned a total of 8038 males and 512 females as under instruction, besides 20,372 males and 510 females able to read and write, but not under instruction. For fiscal and administrative purposes, Moradábád is sub-divided into 6 *tahsíls* and 6 *parganás*. The District contained, in 1883–84, 5 municipal towns—namely, Moradábád, Dhanaura, Chandausi, Amroha, and Sambhal. Their aggregate income amounted in that year to £10,098; from taxes, £9044, or 1s. 0½d. per head of the population (171,553) within municipal limits. Eight other towns, although not ranking as municipalities, are subject to local taxation in the shape of a house-tax for police and conservancy purposes.

Medical Aspects.—The climate of Moradábád is generally healthy, except in the submontane tract which borders on the Tarái, and in the lowlands of the Ganges and Sot. It is neither very dry nor

Morámárnai. — River in Darrang District, Assam. — *See* MÁRÁ-MARNAI.

Morár. — Formerly the British cantonment of Gwalior, and head-quarters of the Gwalior Division of the Bengal Army; situated in the State of Gwalior, Central India, in lat. 26° 13′ 40″ N., long. 78° 16′ 30″ E., on the river Morár, an affluent of the Sind river. Population (1881) 24,022, namely, 15,418 males and 8604 females. Hindus numbered 16,630; Muhammadans, 4846; and 'others,' 2546.

In March 1886, the fortress of Gwalior, with the cantonment of Morár, were restored to the Mahárájá Sindhia, after having been held by British troops since the suppression of the Mutiny in 1858. The British troops have been removed to Jhánsi, which is to be the future head-quarters of the military division.

Morár stands on a slightly concave plain of alluvial soil of no great depth, covering the eastern edge of the sandstone rocks which culminate in the fortress of Gwalior. Morár is connected with the fortress by a good level road, about 3½ miles long, shaded by an avenue of fine trees. This road branches, within easy range of the fortress guns, on the north to Agra, and on the south to the ancient city of Gwalior, the residence of the Mahárájá Sindhia.

The British cantonments lay along the right or easterly bank of the Morár river, which is crossed by a handsome stone bridge. The civil lines lay on the Gwalior side; and here resided the civil and political staff of the Gwalior Agency, who were under the control of the Government of India, exercised through the Agent to the Governor-General for Central India, whose head-quarters are at Indore. The Brigadier and his staff looked to the same central political authority in all matters not

are returned as under cultivation, 61·74 square miles as cultivable, and 37·09 square miles as barren. Population (1872) 231,100; (1881) 231,863, namely, males 121,656, and females 110,207. Classified according to religion, there were in 1881—Hindus, 134,209, or 57·9 per cent.; Muhammadans, 96,616, or 41·6 per cent.; Jains, 162; and 'others,' 876. Of the 307 villages comprising the *tahsíl*, 183 had less than five hundred inhabitants, while only 2 towns had upwards of five thousand. Total Government land revenue, £26,178, or with local rates and cesses, £29,717. Rental paid by cultivators, including cesses, £53,756. In 1885, Moradábád *tahsíl* contained 2 civil and 3 men, 964 European infantry, and 1135 Native infantry. In cantonments, the Native infantry lines lay along an upper reach of the river, to the south or right front of the force, and also to the north close to the *band;* while below, or to the north of the Native infantry, were the lines of the European officers, stretching along a broad reach of the river, which was here once dammed up so as to form a considerable lake, to afford bathing for the troops.

Nearly twenty years ago, the Government began the demolition of the unhealthy and unsightly hut-barracks hastily run up after the Mutiny, and erected large barracks, built of the fine sandstone of the Gwalior Hills, echeloned along the plain east of the officers' lines. No expense was spared to make these in all respects sanitary and commodious, and as comfortable as the climate admits. These handsome barracks, with all other buildings in the fort and cantonments, have now been made over to the Mahárájá Sindhia. Trees and gardens, irrigated by an abundant supply of good water, have effected an entire change on this bleak and barren plain. The climate and topography are fully treated of under GWALIOR.

The story of Morár during the Mutiny is a melancholy one; and the defects then noticed in its purely native garrison and surroundings (for it has twice proved seriously false to both the British and Native Governments) have been kept steadily in view in its new organization. The battle-fields of Panniár to the south of Gwalior, and Mahárájpur to the north, tell alike of the inflammable materials here situated, and also of the bravery and skill displayed by our Indian army against great odds.

Morása.—Town in Parántij Sub-division, Ahmadábád District, Bombay Presidency; situated 52 miles north-east of Ahmadábád city, in lat. 23° 27′ 45″ N., and long. 73° 20′ 45″ E. Population (1881) 7031, namely, 3745 Hindus, 3160 Muhammadans, and 126 Jains. Municipal income (1882-83), £422; incidence of municipal taxation, 11¼d. Morása or Modása is situated on the river Májham, and occupies an important strategical position between Gujarát and the hilly tracts constituting the Native States of Edar and Dungarpur.

Industries—dyeing, calico-printing, and oil-pressing. *Mahuá* (Bassia latifolia, *Roxb.*) oil is exported for soap. Has a through camel traffic in raw cotton and opium with Málwá. Post-office, dispensary; two schools, 447 pupils.

Morbhanj (including *Bámangátí*).—The most northerly of the Native States of Orissa, Bengal, lying between 21° 17′ and 22° 33′ 46″ N. lat., and between 85° 42′ 30″ and 87° 13′ 55″ E. long. Area, 4243 square miles. Population (1881) 385,737. Bounded on the north by the Districts of Singhbhúm, Mánbhúm, and Midnapur; on the east by Balasor District; on the south by the State of Nílgiri and Purí District; and on the west by the State of Keunjhar.

Physical Aspects.—Morbhanj State presents every variety of soil and scenery. It abounds in rich valleys; but a vast extent still remains clothed with primeval jungle, of which a large proportion might be cleared for tillage. In the southern portion of the State, the Meghásáni Hill attains a height of 3824 feet above the sea. Large herds of elephants roam through the mountains and forests of Morbhanj, and very successful *khedá* operations have been carried on during the last few years. Morbhanj State is divided into three parts—Morbhanj proper, Uper-bágh, and Bámanghátí; the last was formerly under British management, and Uper-bágh under surveillance, a body of police being quartered there at the Rájá's expense. At present (1884), however, all direct Government connection with Bámanghátí and Uper-bágh has entirely ceased. Chief villages, Baripáda, in lat. 21° 56′ 5″ N., and long. 86° 45′ 41″ E.; and Daspur, in lat. 21° 57′ 40″ N., and long. 86° 7′ 11″ E.

Population.—Of the total population of 258,680 persons, 94,526 were returned in the Census of 1872 as inhabiting the Bámanghátí tract, and 164,154 Morbhanj proper with Uper-bágh. In Bámanghátí the Hindus numbered 23,500, or 24·9 per cent. of the population; Muhammadans, 479, or 0·5 per cent.; 'others' (including aboriginal tribes, etc.), 70,547, or 74·6 per cent. In Morbhanj proper the number of Hindus was 64,714, or 39·4 per cent.; Muhammadans, 748; 'others' (including the aboriginal tribes, chiefly Santáls and Kols), 98,692.

In 1881, the total population of Morbhanj Tributary State, including the Bámanghátí and Uper-bágh tracts, numbered 385,737, namely, males 194,827, and females 190,910. Average density of population, 90·91 persons per square mile; number of villages, 3097; houses, 71,228. Classified according to religion, there were in 1881—Hindus, 189,294; Muhammadans, 2250; aboriginal tribes still professing their primitive faiths, 194,119; and Christians, 74.

Administration, etc.—Morbhanj yields an estimated revenue of £20,500 to its chief, and pays an annual tribute to the British Government of £106. The militia is returned at 972, and the police force

at 483 men. The late chief, Kisori Chandra Bhanj, obtained the title of Mahárájá in recognition of his public spirit and liberality. He died in 1882. His son, the present (1884) chief, is a minor, about 14 years of age, and the State is under the management of the Court of Wards. Native chronicles relate that the principality of Morbhanj was founded, more than two thousand years ago, by a relative of the Rájá of Jaipur in Rájputána. The chief's emblem of signature is a pea-fowl, from a tradition that the family originally sprang from a pea-fowl's egg; and the killing of this heraldic bird is strictly prohibited throughout the State.

Morchopna.—Petty State in the Gohelwár division of Káthiáwár, Gujarát, Bombay Presidency; consisting of 1 village. Area, 88 square miles. Population (1881) 729. Estimated revenue in 1881, £70; tribute of £15, 8s. is paid to the Gáekwár of Baroda, and 18s. to the Nawáb of Junágarh.

Mori.—Hill in the Damán-i-koh tract of the Godda Sub-division of the Santál Parganás, Bengal. One of the principal peaks in the northern section of the Rájmahál Hills, overlooking the great central valley.

Morna (*Múrna*).—River in Berár; flows through the town of Akola, where 2 dams maintain a fine sheet of water, over 4 miles in length. This lasts throughout the year, and is of essential service to the townspeople. The Morna is a tributary of the Purna.

Moro.—*Táluk* in Naushahro Sub-division, Haidarábád (Hyderábád) District, Sind, Bombay Presidency, lying between 26° 24′ and 26° 54′ N. lat., and between 67° 51′ and 68° 42′ E. long. Area, 704 square miles. Population (1872) 45,551; (1881) 44,443, namely, 23,616 males and 20,827 females, dwelling in 1 town and 76 villages; number of houses, 7904. Hindus, 4402; Muhammadans, 36,627; Sikhs, 3189; Christians, 6; and aboriginal tribes, 219. Gross revenue (1880–81), £11,104. In 1884, the *táluk* contained 2 criminal courts; police stations (*thánás*), 5; regular police, 37 men. In 1882–83, the area assessed to land revenue was 41,759 acres; and the area actually cultivated, 33,801 acres.

Moro.—Town and head-quarters of Moro *táluk;* situated in lat. 26° 40′ N., and long. 68° 2′ E., on the main road from Haidarábád to Rohri; 15 miles south-west from Naushahro. Head-quarters of a *múkhtiyárkár*, with the usual public buildings. Population (1881) 2067; municipal revenue (1882–83), £156; incidence of taxation, 1s. 1½d. Manufactures—soap, ornamental armlets, and coarse cloth. Considerable transit trade conducted by *káfilas* or caravans from Khorasán. Moro is said to have been founded, about two hundred years ago, by one Bazid Fakír, of the Moro tribe. Post-office, and school with 79 pupils in 1883–84.

Morpur.—Fort and village to the east of the Barda range, Káthiáwár, Bombay Presidency. The vicinity was once a famous cover for lions, but the lions abandoned the hills, when artillery was fired in the Vághar Expedition of 1860. Population (1881) 548.

Morrellganj.—Town and port in Jessor District, Bengal; situated in lat. 22° 27′ 35″ N., and long. 89° 54′ E., on the Pánguchí, 2½ miles above its confluence with the Baleswar or Haringháta, of which it is a feeder. The town is the property of Messrs. Morrell & Lightfoot, who converted this part of the country from impenetrable jungle into a prosperous rice-growing tract, dotted with thriving villages (1872). The river is a fine fresh-water one, about a quarter of a mile broad, with deep water from bank to bank, affording good holding ground for ships, and possessing a well-sheltered anchorage. Morrellganj was formally declared a port by the Government of Bengal in November 1869, and buoys were laid down in the following month. The project of developing an entrepôt for sea-going trade at Morrellganj has not, however, been attended with success. The English landholder, Mr. Morrell, who conceived the idea, died after spending a large sum of money, which did not yield the return expected from it. The position of Morrellganj on a fine navigable river, commanding a rich rice country, still, however, renders the place a centre of local trade. For long its very existence seemed to depend upon the energy and capital of the individual Englishmen who reclaimed it from the jungle.

Morsí.—*Táluk* of Amraotí District, Berár. Area, 622 square miles; contains 4 towns and 208 villages. Population (1867) 129,385; (1881) 129,688, namely, 66,563 males and 63,125 females, or 208·5 persons per square mile. Number of houses, 22,656. Hindus number 121,262; Muhammadans, 7480; Jains, 921; and Sikhs, 25. Area occupied by cultivators, 313,186 acres. Total agricultural population, 85,222. Total revenue of the *táluk* (1883), £50,568, of which £42,073 was derived from land. The *táluk* contains 1 civil and 3 criminal courts; police circles (*thánás*), 3; regular police, 76 men; village watch (*chaukídárs*), 331.

Morsí.—Town in Amraotí District, Berár; situated in lat. 21° 20′ N., and long. 78° 4′ E., in the centre of the Morsí *táluk*, about 40 miles east of Ellichpur, on the banks of the Narka river. Population (1881) 5592, of whom 4791 were Hindus, 798 Musalmáns, and 3 Jains. Head-quarters of the *tahsíldár*. Small market on Tuesdays. The police station and *tahsílí* are located in one building. Government school, an Assistant Commissioner's court, and *sarái*.

Morvi.—Native State in the Hálár division of Káthiáwár, Gujarát, Bombay Presidency, lying between 22° 23′ and 23° 6′ 30″ N. lat., and between 70° 30′ and 71° 3′ 30″ E. long. Area, 821 square miles. Population (1872) 90,016; (1881) 89,964, namely, 46,547 males and

43,417 females, dwelling in 2 towns and 134 villages, containing 17,242 houses. Hindus number 73,926; Muhammadans, 11,942; 'others,' 4096. The country is generally flat. Water is obtained from wells and rivers. The river Machhu, on which the chief town of MORVI stands, is never dry. An excellent bridge has recently been built over the river. The climate near the coast is good, but fever is common throughout the State. Chief products—grain, sugar-cane, and cotton. Salt and coarse cloth are manufactured. The port of Wawania, on the Gulf of Cutch, belongs to this State. Land communication is kept up by carts and pack-bullocks. A good road is being made to join Morvi and Rájkot.

The present (1881–82) chief, Thákur Sáhib Wághjí, is a Hindu of the Jareja Rájput caste. He was educated at the Rájkumár College; has been on a European tour; and administers the affairs of his State in person. Morvi claims to be directly descended from the Cutch (Kachchh) line, and not through the Nawánagar family, and it possesses a small sub-division in Cutch, with a port at Jangi. Many disputes have arisen with the Ráo of Cutch regarding this port and the sea-borne trade. The differences which exist between the two States find a vent in obstructions offered to traders. The value of exports has fallen from £141,300 in 1881–82 to £123,400 in 1882–83. Negotiations were in progress (1882–83) for a complete severance of the interests of Cutch and Morvi. The fourth-class State of MALIA is an offshoot from Morvi. Tradition represents the chief of Morvi as the descendant of the eldest son of the Ráo of Cutch, who, in the latter part of the 17th century, was murdered by a younger brother, and whose family thereupon fled to this place, then a dependency of Cutch. Their possession of Morvi was subsequently sanctioned by the Cutch ruler.

Morvi is officially ranked as a 'second-class' State. The chief entered into the same engagements as the other Káthiáwár chiefs in 1807. He has power to try his own subjects for capital offences without the express permission of the Political Agent. He enjoys an estimated gross yearly revenue of £83,585; pays a tribute of £6156 jointly to the British Government, to the Gáekwár of Baroda, and to the Nawáb of Junágarh; and maintained in 1882–83 a military force of 417 men. He does not hold a *sanad* authorizing adoption; the succession of his house follows the rule of primogeniture. There are at present 26 schools in the State, with a total of 1247 pupils. Transit duties are not levied in the State.

Morvi.—Chief town of Morvi State in the Hálár *prant* or division of Káthiáwár, Bombay Presidency; situated in lat. 22° 49′ N., and long. 70° 53′ E., on the river Machhu, which, 22 miles farther north, enters the Gulf of Cutch. Population (1872) 12,872; (1881) 15,353, namely,

7746 males and 7607 females. Hindus number 10,019; Muhammadans, 3530; Jains, 1779; Christians, 19; and Pársís, 6. Distant from Rájkot, 35 miles.

Morwára.—State and town in the Pálanpur Agency, Bombay Presidency.—*See* THARAD.

Moscos.—Group of islands off the coast of Tavoy District, Tenasserim Division, British Burma; extending in a chain parallel to the shore, from lat. 13° 47′ to 14° 28′ N., and distant from it from 3 to 5 leagues. There is a safe channel between, with soundings varying from 10 to 15 fathoms, deepening generally near the islands. The Moscos are divided into 3 groups, the Northern, Middle, and Southern, called in Burmese Hein-se, Maung-ma-gan, and Laung-lon respectively. The south and middle groups contain the largest and highest islands, between which are safe channels.

Motákotarna.—Native State within the British Agency of Mahi Kántha, Gujarát, Bombay Presidency. Population (1881) 595. The chief pays no tribute, and does not hold a patent of adoption. The family follows the rule of primogeniture. Transit dues are levied in the State. Gross annual revenue, £90.

Moth (*Maunth*).—Central *tahsíl* of Jhánsi District, North-Western Provinces; consisting of a level plain, dotted with hills, and intersected by the river Betwá. The soil is largely composed of *már* or black cotton lands, and is very fertile, with the exception of a strip along the high bank of the Betwá, where the rainfall is slight and capricious. Area, 247 square miles, of which 137 are cultivated. Population (1872) 55,391; (1881) 57,208, namely, males 29,139, and females 28,069. Hindus in 1881 numbered 54,777; Muhammadans, 2285; and Jains, 146. Number of villages, 119, of which 86 contain less than five hundred inhabitants. Land revenue, £11,247; total Government revenue, £12,662; rental paid by cultivators, £23,957; incidence of Government revenue per acre, 1s. 5⅛d. In 1884 the *tahsíl* contained 1 civil and 1 criminal court, 7 police circles (*thánás*), a regular police force of 81 men, and a village watch or rural police (*chaukídárs*) of 217 men.

Moth (*Maunth*).—Town in Jhánsi District, North-Western Provinces, and head-quarters of Moth *tahsíl;* situated on the Jhánsi and Cawnpur road, 32 miles from Jhánsi town. Population (1881) 3395. Besides the usual *tahsílí* courts and offices, the town contains a boys' and girls' school, police station, post-office, and travellers' bungalow. A small house-tax is levied for police and conservancy purposes.

Motíhári.—*Sadr* or head-quarters Sub-division of Champáran District, Bengal, lying between 26° 14′ 30″ and 27° N. lat., and between 84° 32′ 30″ and 85° 21′ E. long. Area, 1518 square miles; number of villages, 4594; houses, 153,842. Population (1881) 1,017,556, of

whom 879,812 were Hindus, 137,633 Muhammadans, and 111 Christians. Average number of inhabitants per square mile, 670; persons per village, 221; villages per square mile, 3·03; houses per square mile, 106; persons per house, 6·6; proportion of males in total population, 50·4 per cent. This Sub-division consists of the 6 police circles of Motíhári, Adápur, Dháká-Rámchandra, Kesariyá, Madhuban, and Govindganj. In 1883 it contained 3 magisterial and revenue courts; a regular police 215 strong, besides 1173 village watchmen.

Motíhári.—Town, municipality, and administrative head-quarters of Champáran District, Bengal. Lat. 26° 39′ 46″ N., long. 84° 57′ 29″ E. Population (1872) 8266; (1881) 10,307, namely, Hindus, 7492; Muhammadans, 2771; 'others,' 44. Area of town site, 2222 acres. The town is situated along the east bank of a lake, known as the Motíhári Lake. Small *bázár*, jail, civil offices, indigo factory, dispensary, opium office, school, and telegraph office. Municipal income in 1883–84, £685, or 10d. per head of the population. Good roads run to Bettiá, Dháká, Seráhá, Motípur, Sattar *ghát*, and Govindganj.

Motíjharná.—Waterfall in the Damán-i-koh tract of the Rájmahál Sub-division of the Santál Parganás, Bengal; picturesquely situated at an angle where two hill ranges meet, in the north-eastern corner of the District, close to the Mahárájpur station on the loop-line of the East Indian Railway. The fall is formed by the waters of a small hill stream, which leaps over two successive ledges of columnar basalt. The base of the lower ledge is being gradually eaten away into the form of a cave behind the fall. An annual fair is held here in February.

Motí-taláo ('*Lake of Pearls*').—Large tank in Ashtagram *táluk*, Mysore District, Mysore State, formed by a dam carried across the gorge where several hill streams unite. Lat. 13° 10′ N., long. 78° 25′ E. The embankment is said to have been constructed by the Vishnuite reformer Rámánujachári, who lived at the neighbouring town of MELUKOT. Irrigation is effected by means of a channel, commanding about 4 square miles of country. The tank, if full, would contain two years' supply for this area.

Motupalli.—Small seaport town (identified with the *Mutfili* of Marco Polo) in Báptalá *táluk*, Kistna District, Madras Presidency. Lat. 15° 43′ 40″ N., long. 80° 20′ E. Population (1881) 944; number of houses, 215. Motupalli is now only an obscure fishing village, but if it is to be identified with the site of Mutfili it must once have been of considerable importance. Here in 1290 (the time of Marco Polo's visit) Queen Rudramma, one of the many meritorious female rulers of India, must have had her court. Colonel Yule's edition of Marco Polo's travels has the following passage:—'When you leave Maabar and go about a thousand (some copies have five hundred) miles in a

northerly direction, you come to the kingdom of Mutfili. This was formerly under the rule of a king, and since his death, some forty years past, it has been under his queen, a lady of much distinction, who, for the love she bore him, never would marry another husband. And I can assure you that during all the space of forty years she administered her realm as well as ever her husband did, or better; and as she was the lover of justice, of equity, and of peace, she was more beloved by those of her kingdom than ever was lord or lady of theirs before. . . . In this kingdom also are made the best and most delicate buckrams, and those of the highest price; in sooth they look like the tissue of a spider's web. There is no king or queen in the world but might be glad to wear them.' Motupalli was prominently brought into notice about 1770 as the port used by the French troops in Guntúr.

Motúr (*Mohtúr*).—Plateau in Chhindwárá District, Central Provinces; situated in lat. 22° 17′ N., and long. 78° 37′ E., 35 miles north-west of Chhindwárá, 3500 feet above sea-level. The plateau is open and free from jungle, and during the hottest months of the year the climate is temperate. Motúr has been tried as a sanitarium for European troops from Kamthí (Kamptee), but its inaccessibility and the distaste of the soldiers for so lonely a spot rendered the experiment a failure.

Moulmein.—Town in Amherst District, British Burma.—*See* MAULMAIN.

Moung-daw.—Head-quarters of the Naf township, Akyab District, Arakan Division, British Burma.—*See* MAUNG-DAW.

Moung-ma-gan.—Group of islands off the coast of Tavoy, in British Burma.—*See* MOSCOS.

Mowa.—Town in Jaipur (Jeypore) State, Rájputána; situated in lat. 27° 3′ N., and long. 76° 59′ E., on the route from Agra to Ajmere (Ajmír), 70 miles west of the former and 158 east of the latter. It contains a mud fort, with bastions. Population (1881) 4765. The metalled road from Agra to Ajmere passes through Mowa, running east and west; while another metalled road from Hindaun road station on the Rájputána-Málwá Railway, 11 miles distant, runs through Mowa to Hindaun, and thence (unmetalled) on to Karauli. The travellers' bungalow where these roads intersect is kept up by the Jaipur State.

Mowa.—Port in Káthiáwár, Bombay Presidency.—*See* MUHUWA.

Mowána.—*Tahsíl* and town in Meerut (Merath) District, North-Western Provinces.—*See* MAWANA.

Mowár.—Town and municipality in Kátol *tahsíl*, Nágpur District, Central Provinces, on the Wardhá river, 6 miles north of Jalálkherá; surrounded by a fertile country, covered with gardens and groves.

Population (1881) 4054, namely, Hindus, 3690; Muhammadans, 315; Jains, 40; aboriginal tribes, 7; and 'others,' 2. Municipal income (1882–83), £262, of which £253 was derived from taxation; average incidence of taxation, 1s. 3d. per head. The inhabitants are principally engaged in cultivation or the manufacture of ordinary cotton cloth. Mowár has a good *bázár*, and school and police buildings. Two large dams have been made to restrain the river from flooding the town during the monsoons. The place does a good trade; but is reckoned unhealthy.

Moyár.—The most important stream of the Nílgiri plateau, rising on Makúrti Peak, Nilgiris District, Madras Presidency, in lat. 11° 35″ N., and long. 76° 37′ E. After receiving the drainage of two large valleys, it flows past Páikára and Nediwattam, and enters the plains at the north-west corner of the range. It joins the Bhaváni at Denáikankotái. The Moyár is remarkable among hill streams for its long reaches or pools, divided from each other by rocky rapids. In these pools are now to be found trout and other fish, the ova of which were imported from England by the late Mr. W. G. M'Ivor.

Mro-haung (or *Myo-haung*, '*Old Town*').—Township in Akyab District, Arakan Division, British Burma. So named from containing Old Arakan, the capital of the ancient Arakanese kingdom; the Arakanese name was Myauk-u. It is situated on the Ku-la-dan river. On the north and east are forest-clad hills; but below and to the west of these the country is rich and fertile, and towards the south, much intersected by creeks, which serve as means of communication. The township is divided into 16 revenue circles. Population (1876–77) 24,316; (1881) 38,055. The township contains 260 villages. In 1882 the gross revenue was £15,782, of which £10,000 was derived from land, £4538 from capitation-tax, £96 from fishery revenue, and £30 from net-tax. The local cess contributed £1018. The area under cultivation was 49,932 acres, mostly rice. Agricultural stock—22,781 horned cattle, 424 goats, 794 pigs, 6277 ploughs, 1364 carts, and 2373 boats.

Mro-haung (formerly called *Arakan*).—Ancient capital of Arakan, and now head-quarters of Mro-haung township, Akyab District, British Burma. Lat. 20° 44′ N., long. 93° 26′ E. It appears to have been known to the geographer Ptolemy under the name of Triglyphon, which is probably derived from the cognizance of the town—once a famous seat of Buddhism—the sacred Buddhist triglyph or trident, the three prongs of which represent Buddha, the Law, and the Congregation, the uniting line at the base representing their unity. Mro-haung is built on a rocky plain, at the head of a branch of the Ku-la-dan river, about 50 miles from its mouth, and almost at the extreme limit of tidal influence. The ruins of the ancient fort still exist; they

consist of three square enclosures, one within the other, surrounded by masonry walls of considerable thickness. Traces of the massive outer city wall may yet be seen; the platform, on which stood the palace, also remains, and within the sacred precincts stand the court-house and police lines.

On the conquest of Arakan by the Burmese in 1784, the town made no resistance, and became shortly afterwards the capital of one of the four Districts into which the country was divided. During the first Anglo-Burmese war, the British troops under General Morrison attacked Arakan, which was found to be strongly fortified, and was only taken after a severe contest. The capture of this stronghold led to the immediate retirement of the whole Burmese army from the Province; and General Morrison cantoned the greater portion of his forces in the town. As soon as the rains commenced, early in May, disease broke out in the cantonments, and carried off more victims than in any other portion of the country in which British troops were quartered; indeed, it may be said without exaggeration that the Arakanese army was almost destroyed by it. This excessive mortality was due to the unhealthiness of the place, which Dr. Mason describes thus in the 2nd vol. of the *Transactions of the Medical and Physical Society of Calcutta*:—'Its site is such as one would at first sight pronounce to be prolific of those noxious exhalations, whatever they may be, that are generally allowed to engender intermittent fever. It lies on the banks of a muddy river, or rather ramifications of a river, buried among hills at a distance of nearly 40 miles from the sea, and surrounded on every side by jungle and morass. The tide overflows the flat borders of the river to a considerable extent; its reflux converts these into a noisome swamp, and in this swamp, strange to say, a great part of Arakan is built.' It can only be a cause for wonder that such a place should have remained for 350 years the capital of a kingdom. Soon after the close of the war the troops were removed, and the head-quarters of the Division placed at Akyab. From this time, Mro-haung gradually sank in importance, and in 1881 contained a population of only 3065 persons. Market and a Government school.

Muattapalai.—*Táluk* or Sub-division of Travancore State, Madras Presidency. Area, 312 square miles, containing 162 *karas* or villages. Population (1875) 91,674; (1881) 95,460, namely, 47,395 males and 48,065 females, occupying 18,817 houses. Hindus numbered 50,606; Christians, 39,288; and Muhammadans, 5566.

Mubárakpur.—Town in Muhammadábád *tahsíl*, Azamgarh District, North-Western Provinces; situated in lat. 26° 5′ 15″ N., long. 83° 20′ E., 7 miles from Muhammadábád town. Mubárakpur is said to have been formerly called Kásimábád, and to have fallen into decay before it was resettled under the name of Rájí Mubárak by the ancestor of

the present Shaikh landholders. Population (1881) 13,157, namely, males 6507, and females 6650. Muhammadans number 9066, and Hindus 4091. Area of town site, 276 acres. Mubárakpur contains an imperial post-office, police outpost station, and school. Retail markets for miscellaneous commodities are held four times a week. The inhabitants are chiefly weavers, and there is also a small manufacture in sugar-refining. Serious conflicts have occurred between the Muhammadan and Hindu inhabitants of the town, especially in 1813 and 1842. The ill-feeling between the two religions is said to be still smouldering, and liable to break out on small provocation. A small house-tax for police and conservancy purposes realized £142 in 1881-82.

Mudak-dor.—Sacred hill on the bank of the Káveri (Cauvery) river, near TALKAD in Mysore District, Mysore State. The *játra*, or festival of the god Mallikarjuna, held for 15 days in January or February, is annually attended by 10,000 persons.

Múdbidri.—Ruined town in South Kánara District, Madras Presidency. Lat. 13° 4′ 10″ N., long. 75° 2′ 30″ E. A very old Jain city, which, to judge from the deserted streets with their moss-grown house sites, probably once contained many thousands of inhabitants. There are no fewer than 18 Jain *bastis* or stone pagodas in the town. These are maintained by old endowments and subscriptions from Jains throughout the District, and contain some superb carving, and many valuable inscriptions. They bear witness to the marvellous industry and devotion of the Jains.

Muddebihál.—Sub-division of Bijápur District, Bombay Presidency. Area, 564 square miles, containing 1 town and 148 villages. Population (1872) 83,848; (1881) 65,024, namely, 31,766 males and 33,258 females, occupying 11,897 houses. The decrease of 22·4 per cent. is due to the mortality and emigration during the famine of 1876-77. Hindus numbered 57,371; Muhammadans, 7211; and 'others,' 442. In the north of the Sub-division is the rich valley of the Don. The central plateau of sandstone and limestone is fairly fertile. The south and south-east is a barren tract of metamorphic granite, fertile only close to the Kistna. The soil varies greatly. The Don forms the northern boundary of Muddebihál, and the Kistna the southern boundary. Ponds are few, but every village has good wells. The detail survey of the Sub-division was not completed up to 1883. In 1881-82, of 185,948 acres held for tillage, 10,054 acres were fallow or under grass. Of the remaining 175,894 acres, grain crops occupied 118,454 acres; pulses, 6098 acres; oil-seeds, 4179 acres; fibres, 46,651 acres (46,507 of them under cotton); and miscellaneous crops, 512 acres. The Sub-division contains 1 civil and 2 criminal courts; 7 police circles (*thánás*); 41 regular police; and

316 village watch (*chaukídárs*). Schools in 1882-83 numbered 15. Land revenue (1882), £14,048.

Muddebihál.—Town in Muddebihál Sub-division, Bijápur District, Bombay Presidency; situated 48 miles east by north of Kaládgi, in lat. 16° 20′ 25″ N., and long. 76° 10′ 20″ E. Population (1881) 2841. Sub-judge's court, dispensary, post-office, and school with 167 pupils in 1883-84.

Mudgal (or *Mudugal*).—Town and fort in Nizám's Dominions. Lat. 16° 0′ 34″ N., and long. 76° 29′ 47″ E. Population, 3182. The fort is four and a half furlongs from north to south, and three and a half from east to west. The northern part is situated on the plain; the southern portion ascends and includes the highest ridge of a rocky hill. Mudgal was, in A.D. 1249-50, the seat of one of the Governors of the Yadavas. The fort subsequently came into the possession of the Warangal Rájás, and was taken from them by the Muhammadans early in the 14th century. When Muhammad Tughlak's Deccan governors rebelled and established the Bahmaní dynasty at Kulbarga, Mudgal became one of the frontier forts of the new kingdom. During the rule of the Bahmaní kings, Mudgal contained a considerable garrison. In 1364, the Rájá of Vijayanagar slaughtered the whole of the Bahmani garrison. After the dissolution of the Bahmaní dynasty, Mudgal came into the possession of the kings of Bijápur. After the fall of Bijápur, the Emperor Aurangzeb took the fort. At Mudgal there is a small Roman Catholic colony, originally converted by one of St. Francis Xavier's missionaries from Goa. The colony was endowed by several kings of Bijápur, and has retained their grants through all revolutions.

Mudgiri.—*Táluk* of Kadur District, Mysore State.. Area, 400 square miles. Population (1881) 45,266, namely, 24,190 males and 21,076 females. Hindus, 43,307; Muhammadans, 1609; and Christians, 350. In 1883, the *táluk* contained 1 criminal court; police circles (*thánás*), 5; regular police, 39 men; village watch (*chaukídárs*), 162. Total revenue, £11,162.

Mudhol.—Native State under the Political Agency of the Southern Maráthá Country, Bombay Presidency; situated between 16° 6′ 50″ and 16° 26′ 45″ N. lat., and between 75° 4′ 21″ and 75° 31′ 56″ E. long. Area, 362 square miles. Population (1872) 58,921; (1881) 52,163, namely, 25,771 males and 26,392 females. Towns, 2; villages, 77; houses, 10,478. Hindus number 48,273; Muhammadans, 3710; and 'others,' 180. Bounded on the north by Jamkhandi State; on the east by the Bágalkot Sub-division; on the south by Bijápur and Belgáum Districts and the Kolhápur State; and on the west by the Gokák Sub-division of Belgáum District. The general aspect of the country is flat, with slight undulations. The scenery is monotonous, and, except during

the rainy weather, the country presents a parched and barren aspect. There are no large mountains, the small hill ranges not being more than 150 feet high. The greater portion of the soil is black, the remainder being the inferior description of red and stony land known as *mál*. The only river passing through the State is the Ghátprabha, which is navigable during the monsoons by boats of less than a ton burden; but it is never used as a means of communication for travelling or trade. It waters in its course about half the villages

Mughalpur. — Town in Moradábád *tahsíl*, Moradábád District, North-Western Provinces; situated in lat. 28° 55′ 43″ N., long. 78° 45′ 55″ E., on the open plain, 7 miles north-west of Moradábád town, and 1 mile west of the Rámgangá river. Population (1881) 5277, namely, Muhammadans 3003, and Hindus 2274. Number of houses, 689. An old fort is still standing near the town.

Mughal Sarái (*Mogul Serai*).—Town in Benares District, North-Western Provinces. Lat. 25° 16′ 30″ N., long. 83° 10′ 45″ E. Population (1881) 1118. Station on the East Indian Railway, 470 miles from Calcutta (Howrah), and 6 miles from Benares. Branch railway to the Ganges opposite Benares city. Police station and post-office.

Mughia (*Moghia*). — Aboriginal tribe in Rájputána and Central

triya origin, descended, according to tradition, from a common ancestor with Sivají the Great. This name, however, has been entirely superseded by the second designation of Ghorpáde, which is said to have been acquired by one of the family who managed to scale a fort previously deemed impregnable, by fastening a cord around the body of a *ghorpad* or iguana. All that is authentically known of the history of the family is that it held a high position at the court of Bijápur, from which it received the lands it still holds. The Mudhol chiefs were the most determined opponents of Sivají during his early conquests; but on the overthrow of the Muhammadan power they joined the Maráthás, and accepted military command from the Peshwá. The grandfather of the present ruler (who died in 1854) was the first who became a feudatory of the British Government. The present (1881–82) chief is Venkatráo Balwant Ráo Rájá Ghorpáde, a Hindu of the Maráthá race. He administers his estate in person, and enjoys an estimated gross yearly revenue of £23,800, and pays a tribute of £267, 4s. to the British Government. He is officially recognised as a 'first-class' Sardár in the Southern Maráthá Country, and maintains a military force of 444 men. There is one civil court. An appeal lies to the chief, who has power to try his own subjects for capital offences without the express permission of the Political Agent. The family of the chief hold a title authorizing adoption, and follow the rule of primogeniture in matters of succession. There are 21 schools in the State, with 1038 pupils. Three municipalities.

Mudhol.—Chief town of Mudhol State, Bombay Presidenc situated in lat. 16° 19′ 50″ N., and long. 75° 19′ 20″ E. Populatio (1881) 6060, of whom 4985 are Hindus, 1010 Muhammadans, an 65 Jains. Dispensary; patients in 1882–83, 7348; number of person vaccinated, about 2000.

Múdivedu.—Town in Madanapalli *táluk*, Cuddapah (Kadapa District, Madras Presidency. Lat. 14° 1′ 30″ N., long. 78° 44′ 10″ E. Population (1881) 4120; number of houses, 1043.

Lat. 16° 0′ 34″ N., and long. 76° 29′ 47″ E. Population, 3182. The fort is four and a half furlongs from north to south, and three and a half from east to west. The northern part is situated on the plain; the southern portion ascends and includes the highest ridge of a rocky hill. Mudgal was, in A.D. 1249–50, the seat of one of the Governors of the Yadavas. The fort subsequently came into the possession of the Warangal Rájás, and was taken from them by the Muhammadans early in the 14th century. When Muhammad Tughlak's Deccan governors rebelled and established the Bahmaní dynasty at Kulbarga, Mudgal became one of the frontier forts of the new kingdom. During the rule of the Bahmaní kings, Mudgal contained a considerable garrison. In 1364, the Rájá of Vijayanagar slaughtered the whole of the Bahmaní garrison. After the dissolution of the

Mu-dun (*Moo-doon*).—Chief village in the Mu-dun revenue circle, Zaya township, Amherst District, Tenasserim Division, British Burma; 9 miles distant from Maulmain. Contains a court-house, a Public Works Department inspection bungalow, and a police station. In the neighbourhood are some ornamental pieces of water, generally known as the 'Sacred Lakes.' Population (1881) 2483.

Mugdái.—Spring and cavern in the Perzágarh Hills, Chándá District, Central Provinces. The ascent leads to a rocky platform, beyond which rises a smooth sheer precipice, 100 feet high, of sandstone rock, now blackened by exposure. Over this, in the rains, plunges a broad cascade, reduced in the driest weather to a trickling stream, which falls into a small cleft in the platform below, where through the year is an unvarying depth of 7 feet of water. A few yards off is a large shallow cavern, sacred to the Máná goddess, Mugdái. On this platform the inhabitants of the neighbouring villages found a refuge from the Pindárís; and a small fair is still held here.

Mughalbhin.—Chief town in the Játi *táluk*, Sháhbandar Subdivision, Karáchi (Kurrachee) District, Sind, Bombay Presidency; situated in lat. 24° 22′ N., and long. 68° 18′ 30″ E., on the banks of the Gungro, a portion of the Pinyári branch of the Indus. Connected by good roads with Mírpur Batoro, distant 26 miles north; with Sháhbandar, 30 miles south-east; and with Belo, 33 miles north-west. Mughalbhin stands on the highway to Cutch (Kachchh) from Sind, and is 48 miles from Lakhpat on the Kori creek, over which is a ferry. Head-quarters of

a *múkhtiyárkár*, with the usual public offices. Population (1881) under 2000 About 2 miles south of Mughalbhin is an embankment 200 yards long by 13⅓ broad, lined with a fine avenue of *bábul* trees; the fresh-water channel above is called the Gungro, and below is the old salt-water channel of the Pinyári. Trade in grain and coarse cloth. Rice is extensively grown in the neighbourhood. A large fair is held annually in February in honour of a Muhammadan *pír* or saint, whose tomb is then visited by about 5000 persons.

Mughalpur. — Town in Moradábád *tahsíl*, Moradábád District, North-Western Provinces; situated in lat. 28° 55′ 43″ N., long. 78° 45′ 55″ E., on the open plain, 7 miles north-west of Moradábád town, and 1 mile west of the Kámgangá river. Population (1881) 5277, namely, Muhammadans 3003, and Hindus 2274. Number of houses, 689. An old fort is still standing near the town.

Mughal Sarái (*Mogul Serai*).—Town in Benares District, North-Western Provinces. Lat. 25° 16′ 30″ N., long. 83° 10′ 45″ E. Population (1881) 1118. Station on the East Indian Railway, 470 miles from Calcutta (Howrah), and 6 miles from Benares. Branch railway to the Ganges opposite Benares city. Police station and post-office.

Mughia (*Moghia*). — Aboriginal tribe in Rájputána and Central India. For an account of this tribe, and of the measures which are being taken with a view to its amelioration, see article RAJPUTANA. Until the date of these recent measures the Mughias were one of the most persistently predatory tribes in Central India.

Mugori.—State in the Mahi Kántha Agency, Bombay Presidency.—*See* MAGORI.

Muhamdi.—*Tahsíl* or Sub-division of Kheri District, Oudh; lying between 27° 41′ and 28° 10′ N. lat., and between 80° 4′ 30″ and 80° 41′ E. long. Bounded on the north and east by Kheri *tahsíl;* on the south by Sítápur and Hardoi *tahsíls;* and on the west by Sháhjahánpur District in the North-Western Provinces. The *tahsíl* comprises the 7 *parganás* of Muhamdi, Pasgáwán, Aurangábád, Kásta, Haidarábád, Magdapur, and Atwá Pipária. Area, 666 square miles, of which 304 are cultivated. Population (1869) 204,255; (1881) 232,909, namely, males 125,194, and females 107,715. Total increase since 1869, 28,654, or 14· per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 203,341; Muhammadans, 29,262; and 'others,' 306. Land revenue, £25,530. In 1883 the *tahsíl* contained 1 civil and 1 criminal court, 3 police circles (*thánás*), a regular police force of 69 men, and a village watch or rural police of 1092 *chaukídárs*.

Muhamdi.—*Parganá* in Kheri District, Oudh; bounded on the west by the Gúmtí, which separates it from Magdapur and Atwá Pipária, and on the south by a tributary of the same river, which divides it from Pasgáwan. Along the banks of the Gúmtí, the land is

high and sandy for a short distance; it then rather suddenly sinks into a loamy flat of high fertility and fair cultivation. Good crops of cereals and sugar-cane are produced. Area, 116 square miles, of which 66 are under cultivation. Population (1881) 55,333, namely, 48,482 Hindus and 6851 Musalmáns. Of the 136 villages comprising the *parganá*, 49½ are owned by Muhammadans, 26 by Rájputs, 21 by Bráhmans, and 16 by Government. Land revenue, £5860.

Muhamdi was settled as a *parganá* centuries ago. The town which bears that name was not then founded, but the country was fiscally organized by the Sayyids of Barwár long before the end of the 17th century. They held Muhamdi and 17 other *parganás* in a position of some independence during the decline of the Mughal Empire. Some four or five generations back, their representative was displaced by a Sombansi Rájput of Hardoi, who had been captured and converted to Islám, and married to a slave girl of the Sayyid chief; he ousted his master's son from the estate and title about 1743 A.D. This family retained possession until 1793, when the then representative was seized as a rebel and defaulter, and the estate broken up. The *parganá* of Muhamdi is now owned principally by small proprietors.

Muhamdi.—Town in Kheri District, Oudh, and head-quarters of Muhamdi *tahsíl* and *parganá*; situated 3 miles west of the Gúmtí river, on the road from Lakhimpur to Sháhjahánpur, in lat. 27° 57′ 15″ N., and long. 80° 15′ E. Formerly the head-quarters of the District, which were removed to Kheri upon the reoccupation of the country after the suppression of the Mutiny. Population (1869) 4729; (1881) 6635, namely, Hindus 3909, and Muhammadans, 2726. A small house-tax is levied for police and conservancy purposes. A daily and a bi-weekly market. Sugar manufacture and Government distillery. Besides the usual sub-divisional court buildings, the town contains a police station, Anglo-vernacular school, and charitable dispensary.

Muhammadábád. — *Tahsíl* of Gházípur District, North-Western Provinces; lying on the north bank of the Ganges, and consisting chiefly of alluvial lowland.—*See* KURANTADIH.

Muhammadábád.—South-eastern *tahsíl* of Azamgarh District, North-Western Provinces, comprising the *parganás* of Karyát Mittu, Chiriákot, Muhammadábád, and Mau Nátbhanjan, and watered by the Tons and Chhota Sarju rivers, as well as by a number of swamps and marshes, which spread out into large temporary lakes in the rainy season, and wholly or in great part dry up between October and June. The eastern portion of the *tahsíl* is traversed by the Gházípur and Gorakhpur road *viâ* Mau and Dohrighát; and the eastern portion by the road from Gházípur to Azamgarh, passing through Chiriákot and Jahánáganj. A second-class road runs from the one last named, at about two miles south of Azamgarh to Muhammadábád, and thence south-east to Mau.

Third-class roads run from Muhammadábád to Sultánipur, to Sháhganj *viâ* Mubárakpur, to Júanpur, Ghosi, and Kopáganj.

The total area of Muhammadábád *tahsíl* in 1881 was 426·8 square miles, of which 259·2 square miles were cultivated, 65·3 square miles cultivable, and 102·3 square miles uncultivable waste. Population (1872) 275,559; (1881) 327,017, namely, males 166,750, and females 160,267. Increase of population since 1872, 51,458, or 18·6 per cent. in nine years. Classified according to religion, there were in 1881—Hindus, 273,720; Muhammadans, 53,293; and 'others,' 4. Of the 887 towns and villages comprising the *tahsíl*, 697 were mere hamlets with less than five hundred inhabitants. Government land revenue, £36,197, or including local rates and cesses, £42,787. Amount of rent, including cesses, paid by the cultivators, £77,167. In 1881, Muhammadábád *tahsíl* contained 1 civil and 1 criminal court, 4 police circles (*thánás*), and 2 outpost stations, a regular police force of 60 men, and a village watch or rural police of 539 *chaukídárs*.

Muhammadábád. — Town in Azamgarh District, North-Western Provinces, and head-quarters of Muhammadábád *tahsíl*. Population in 1881, 9154, namely, 5266 Muhammadans and 3888 Hindus. The bulk of the population consists of landholders, agriculturists, petty bankers and traders, shopkeepers, weavers, and other artisans. Markets for miscellaneous commodities are held four times a week in different parts of the town and suburbs. There are about 300 looms, and a few sugar refineries. Besides the usual Sub-divisional courts and offices, the town contains a police station, post-office, and village school. A small house-tax levied for police and conservancy purposes yielded £82 in 1882–83.

Muhammadgarh. — Native State under the Bhopál Agency of Central India; lying between Bhílsa and Rahatgarh. Area, about 27 square miles; containing 19 villages with 766 houses. Population (1881) 5347. Hindus number 4300; Muhammadans, 896; and aboriginal tribes, 151, of whom Gonds numbered 79, and Moghias 72. Estimated revenue, £700. No tribute is paid. Muhammadgarh originally formed part of Kurwái State; but on the death of Nawáb Muhammad. Dalil Khán of Kurwái, the latter State was divided between his two sons, Muhammadgarh and Básouda falling to the younger, Asan-ullá Khán. On the death of the last-named, the State was further divided, Bakht-ullá-Khán taking Básouda, and Muhammad Khán, Muhammadgarh. In 1819, Sindhia seized a portion of the State, but it was restored through the intervention of the British Government. The present chief, Háfiz Kúli Khán, is a Pathán, and holds the rank of Nawáb. The chief products of the State are opium and grain. Chief town, Muhammadgarh; lat. 23° 39′ N., long. 78° 12′ E.

Muhammad Khán's Tando.—Sub-division of Haidarábád (Hyder-

ábád) District, Sind, Bombay Presidency.—*See* TANDO MUHAMMAD KHAN.

Muhammadpur.—Village and produce depôt in Sáran District, Bengal. Population (1881) 4378. One of the principal rice-importing marts of the District.

Muhammadpur.—Town in Patná District, Bengal. Lat. 25° 30′ N., long. 85° 46′ E. It forms in reality a suburb of BARH. Population (1872) 6089; (1881) 8479, namely, Hindus, 6868; Muhammadans, 1590; 'others,' 21. Area of town site, 991 acres. Municipal income (1883–84), £160; rate of taxation, 4½d. per head of population. Municipal police, 15 men.

Muhammadpur.—Village on the right bank of the Madhumatí river, in Jessor District, Bengal; lying in lat. 23° 23′ 45″ N., and long. 89° 38′ 30″ E., 14 miles south-east of Mágurá. A large town at the time of our occupation, but desolated between 1836 and 1843 by an epidemic fever; it now survives as a small market village, with a purely local trade, except in the rains, when large numbers of *hilsá* fish are exported to Calcutta. Muhammadpur was founded towards the end of the 17th century, and is ascribed to Sítárám Rái, landholder of Bhúshná, east of Muhammadpur on the Barásiá river. A quadrangular fort, many fine tanks and other ancient remains bear witness to its former importance. For details concerning these, and the legend of the foundation of the town, see *Statistical Account of Bengal*, vol. ii. pp. 213–216.

Muhammadpur.—*Parganá* in Bara Banki District, Oudh; bounded on the north by Sítápur District, on the east by the Chauka river, on the south by Rámnagar *parganá*, and on the west by Sítápur District. Area, 62 square miles, of which 44 are cultivated. Population (1881) 29,814, namely, 27,090 Hindus and 2724 Musalmáns. Government land revenue, £4070. Of the 83 villages comprising the *parganá*, 46 are held in *tálukdárí*, 3 in *zamíndárí*, and 34 in *pattidárí* tenure. The principal *tálukdár* is Rájá Sarabjit Singh, who owns 32 villages.

Muhammadpur.—Town in Faizábád (Fyzábád) District, Oudh; situated 24 miles west of Faizábád town, on the road from Milkípur to Rudaulí. Population (1881) 3168, namely, 3108 Hindus and 60 Muhammadans.

Muhpa.—Town in Nágpur District, Central Provinces.—*See* MOHPA.

Mujnái.—River of Jalpáigurí District, Bengal; rises in the southern slope of the Bhután Hills, and flows in a winding southerly direction into Kuch Behar State. Its tributaries in Jalpáigurí District are the Títi, Angorijhora, Dábdhub, Bírpíti, Halong. In Kuch Behar, the Mujnái falls into the Jaldhaka, in lat. 26° 26′ 30″ N., and long. 89° 14′ 15″ E., after that river has joined the Dharla or Torsha.

Mujpur (or *Munjpur*).—Petty State in the Jháláwár *prant* or

division of Káthiáwár, Bombay Presidency; consisting of one village, with 3 shareholders. Estimated revenue in 1881, £322; tribute of £60, 6s. is paid to the British Government. Area, 3 square miles. Population (1881) 548. Situated three miles south-west of Wadhwán

and west; covered with forests, which contain many large *bijesál* trees, and, under the southern slopes, abundance of young teak. The numerous perennial streams along the foot dot the forest with patches of cultivation. The valleys of Dhoní and Jhirí on the south, and Kholsá on the west, were once immense artificial lakes, with large trading villages on the hill slopes. Now only a few Gond huts occupy the former bed of the water. In the driest weather, the grass in these valleys is brilliantly green, and their streams bright and limpid; but the spring water of the Dhoní valley should be boiled before it is used. The hills produce a kind of snowdrop, of which the Gonds eat the leaves. Under the southern slope is a large excavation where the Gond hunters entrapped the elephants which formerly abounded.

Múl.—Southern *tahsíl* or Sub-division of Chándá District, Central Provinces. Area, 5098 square miles, 881 towns and villages, 53,367 houses, and a total population (1881) of 215,784, namely, males 108,384, and females 107,400. Average density of population, 42·33 persons per square mile. Of the total area of the *tahsíl*, more than one-half, or 2870 square miles, are comprised in the five revenue-

Singh, eldest son of Máharáo Mádhu Singh, the first ruler of Kotah, situated to the south-west of Kotah, is of great importance, as being the only defile practicable for carriages for a considerable distance between the two rivers Chambal and Kálí Sind. Mukand Singh built the gates and the palace situated in the pass. Mukandwára Pass is the scene of endless legends of the valiant Khichi and Hara clans of Rájputs. Amongst the nobles of Kotah, the office of *Ghúta-Ráwat*, or 'Lord of the Pass,' was a coveted honour. This pass is famous in British Indian history as the route of Colonel Monson's retreat before Jaswant Ráo Holkar in July 1804.

1883 the *tahsíl* contained 1 civil and 1 criminal court, with 5 police circles (*thánás*), and 15 out-stations (*chaukís*); strength of regular police, 167 men, besides a village watch of 89 *chaukídárs*.

Múl.—Town in Chándá District, Central Provinces; situated in lat. 20° 4′ N., and long 79° 43′ E., 30 miles north-east of Chándá town. Population (1881) 3844, namely, Hindus, 3493; Muhammadans, 110; Christian, 1; aboriginal tribes, 240. Three-fourths of the population are Telingas. Chief manufactures, coloured cotton cloth, and native shoes and sandals. Rice and sugar-cane are grown in the neighbourhood. A *tahsíldár* is stationed at Múl; which contains a town school for boys, police station house, dispensary, and post-office.

Mula (*Muloh;* also called the *Gandáva Pass*).—Pass over the Brahuik range, by which access is gained from Kachh Gandáva to the table-land of Jhaláwán in Baluchistán. It has three entrances—(1) at Pír Chatta, 9 miles from Kotri; (2) the Taphoi entrance, leading from Jhal, 9 miles south of Kotri; and (3) the Gatti entrance, a very difficult road. The halting-places are—Kuhau, 12 miles from Pír Chatta (elevation, 1250 feet); Hatáchi, 16 miles; Nar (2850 feet), 16 miles; Peshtar Khán (3500 feet), 12 miles; Patki (4250 feet), 10½ miles; Pisi Bent (4600 feet), 12 miles; Bapau (5000 feet), 12 miles. Twelve miles farther on to the source of the Mula stream; and near the village of Angira, the top of the pass is reached at an elevation of 5250 feet above sea-level.

The Mula Pass is thus in all about 102 miles in length from its entrance in the low country to the source of the river, the average rise being about 45 feet in the mile. It was formerly considered, on the whole, to be preferable as a military pass to the Bolán, the road being better, the ascent easier and more gradual, and some supplies, at least, being obtainable in it. At the close of 1839, General Willshire's force, after storming Khelát, returned to Sind by this route; but the guns brought down on that occasion were only light field-pieces. Masson, who traversed this pass, remarks that in a military point of view the route, presenting a succession of open spaces, connected by narrow passages or defiles, is very defensible, at the same time affording convenient spots for encampment, an abundance of excellent water, fuel, and more or less forage. It is level throughout, the road either following the bed of the stream or running near its left bank. It is not only easy and safe, but may be travelled at all seasons, and is the only camel route through the hills intermediate between Sarawán and Jháláwán and Kachhi from the latitude of Shál (where the line of intercourse is by the route of the Bolán river) to Khozdár, from which a road leads into Middle Sind. Danger from predatory bands is not even to be apprehended; and in this respect alone it has an immense advantage over the Bolán Pass.

Dr. Bellew, who passed in 1872 over a portion of the Mula Pass leading to Khozdár, says that in a distance of about 50 miles, extending from Pír Chatta to Gaz, it presents a succession of basins, connected by narrow straits that are very crooked. The basins are those of Pír Chatta, Kuhau, Pání-wat, Jah, Hatáchi, Fazzan, Pír Lakka, Hassna, and Nar. Each of these is more or less cultivated, contains abundant water and fuel, but very little or no pasture, and limited camping surface. The rainy season is in July and August. During these months, violent storms occur on the mountains, and the pass often becomes suddenly flooded by swift torrents that sweep all before them.

Mulágúl (or *Molághúl*).—Village and police station in Sylhet District, Assam; situated at the foot of the Khási Hills, on the bank of the Luba river. The weekly *bázár* is largely attended by traders from the Jaintia Hills. Mulágúl has given its name to a *mahál* or reserve for elephant-hunting.

Mulajinápura.—Native State within the British Political Agency of Mahi Kántha, Gujarát (Guzerát), Bombay Presidency. Population (1881) 221. Tribute of £2, 5s. is paid to the Gáekwár of Baroda.

Múlanúr.—Town in Dhárapuram Sub-division, Coimbatore District, Madras Presidency. Lat. 10° 45′ 30″ N., long. 77° 46′ E. Population (1881) 6421, namely, 6415 Hindus and 6 Muhammadans. Number of houses, 1426.

Mulbágal.—*Táluk* in Kolár District, Bangalore Division, Mysore State. Area, 241 square miles, of which 108 are cultivated. Population (1871) 58,051; (1881) 44,137, namely, 21,872 males and 22,265 females, of whom 41,648 are Hindus, 2404 Muhammadans, and 85 Christians. Revenue (1883), £11,953. The rice and the sugar-cane are of fine quality. In 1883 the *táluk* contained 1 criminal court; police circles (*thánás*), 5; regular police, 45 men; village watch (*chaukídárs*), 218.

Mulbágal (or *Múdla-bágalu*—literally, 'Eastern Gate,' so called from commanding the pass from the table-land of Mysore to the temple of Tirupati).—Town in Kolár District, Mysore State; 18 miles east-north-east of Kolár town; head-quarters of Mulbágal *táluk*. Lat. 13° 9′ 40″ N., long. 78° 26′ 30″ E. Population (1881) 4441, namely, 3290 Hindus and 1151 Muhammadans. An ancient town, having been the seat of government under the Vijayanagar dynasty. Some old temples exist in the neighbourhood; and the tomb of a Musalmán saint annually attracts many pilgrims on the anniversary of his death. There is also a large temple dedicated to Anjaneyaswámi or Hanumán, the idol being of gigantic proportions. All Hindu pilgrims to Tirupati from the west must pass through Mulbágal, where they are required to undergo a ceremony of purification.

Mulgund.—Town in Gadag Sub-division, Dhárwár District, Bombay Presidency; situated 12 miles south-west of the town of Gadag, in lat. 15° 17′ N., and long. 75° 36′ E. Population (1881) 5386. Hindus number 4395; Muhammadans, 965; and Jains, 26. Till 1848, when through failure of heirs it lapsed to the British Government, Mulgund belonged to the chief of Tásgaon. Post-office; two schools with 345 pupils in 1883–84.

Mulí.—Native State in the Jháláwár *prant* or division of Káthiáwár, Gujarát, Bombay Presidency, lying between 22° 33′ 45″ and 22° 46′ 45″ N. lat., and between 71° 25′ and 71° 38′ 15″ E. long. Area, 133 square miles. Population (1872) 17,861; (1881) 19,832. Number of

villages, 19. The country is generally flat, with low rocky ridges; the climate is hot and dry. The usual grains and cotton are grown. The nearest port is Dholera. Mulí is officially ranked as a 'fourth-class' State, and is the only Pramara chiefship in Káthiáwár. Though there is one nominal head or Thákur (who owns but 2 of the 19 villages), the State is divided among a number of sharers of almost equal influence, by whom the usual engagements have been executed. The present (1881–82) chief is Pramara Sartansinghjí, a Hindu of the ancient Rájput clan called Pramara. He has been privately educated, and administers the State in person. He maintained a military force of 222 men in 1882–83. He enjoys an estimated gross yearly revenue of £10,000, and pays a tribute of £935, 8s. jointly to the British Government and to the Nawáb of Junágarh. No *sanad* authorizing adoption is held by the chief; the succession follows the rule of primogeniture. There are 6 schools in the State, with a total attendance of 425 pupils. Transit dues are not levied.

Mulí.—Chief town of Mulí State, Káthiáwár, Bombay Presidency. Lat. 22° 38′ N., long. 71° 30′ E., 13 miles south-west of Wadhwán, on the Bhogáva. Population (1881) 6357. Hindus numbered 5585; Jains, 497; Muhammadans, 268; and Pársís, 7. Famous for its saddle-cloths. Mulí contains a temple of the Swámi Náráyan sect. School; dispensary.

Mulila Deri.—Petty State in the Halár division of Káthiáwár, Bombay Presidency; consisting of 7 villages, with 2 shareholders. Area, 15 square miles. Population (1881) of Mulila Deri town, 1430; of the estate, 2510. Estimated revenue (1881), £1400, from which tribute of £127, 18s. is paid to the British Government, and £17, 10s. to the Nawáb of Junágarh.

Mulki.—Town in South Kánara District, Madras Presidency; situated in lat. 13° 5′ 15″ N., and long. 74° 49′ 35″ E., on an inlet of the sea, 19 miles north of Mangalore. The water is too shallow to admit large vessels, but small fishing and coasting craft find shelter here. Opposite the mouth of the inlet is a group of islets known as the Mulki or Premeira Rocks. The average annual value of imports for the five years ending 1882–83 was £10,176, and of exports £26,476. In 1881–82 the imports were valued at £7352, and the exports at £18,554.

Mullama Konda.—Mountain in Cuddapah (Kadapa) District, Madras.—*See* HORSLEY KONDA.

Múltái.—Southern *tahsíl* or Sub-division of Betúl District, Central Provinces. Area, 961 square miles; number of villages, 310; occupied houses, 17,904. Population (1881) 93,168, namely, males 47,023, and females 46,145. Average density of population, 96·95 persons per square mile. Of the total area of the *tahsíl*, 285 square miles are held revenue-free, leaving the assessed area at 676 square miles. Of these, 485 square miles are returned as under cultivation, 119 square miles as

cultivable but not under tillage, and 72 square miles as uncultivable waste. Total adult agricultural population (male and female), 38,347, or 41·16 per cent. of the whole population. Average area of cultivated and cultivable land for each adult cultivator, 11 acres. Total Government land revenue, including local rates and cesses, levied on the land, £7366, or an average of 5⅜d. per cultivated acre. Total rental, including cesses paid by the cultivators, £13,396, or an average of 10⅞d. per acre of cultivated land. In 1883, Múltái *tahsíl* contained 1 criminal and 2 civil courts; number of police circles (*thánás*), 5; strength of regular police, 59 men, besides a village watch of 408 *chaukídárs*.

Múltái.—Town and municipality in Betúl District, Central Provinces, and head-quarters of Múltái *tahsíl;* situated in lat. 21° 46′ 26″ N., and long. 78° 18′ 5″ E., 28 miles east of Bednúr. Population (1881) 3423, namely, Hindus, 2929; Muhammadans, 436; Satnámís, 2; Jains, 44; Christians, 2; and aboriginal tribes, 10. Municipal income (1882–83), £130, of which £81 was derived from taxation; average incidence of taxation, 5⅝d. per head. The large tank, ornamented with several temples, is reverenced by Hindus as the source of the river Táptí. Múltái has a *tahsílí* and police station, a Government school and a charitable dispensary; and does some trade in the opium and unrefined sugar produced in the neighbourhood. The English burial-ground is now disused.

END OF VOLUME IX.

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